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ABSTRACT

The document presents student materials which were developed to be used to integrate career exploration into the social studies curriculum in the Parkrose (Oregon) school system. Topics of the units are: world of work, world of economics, occupations and employment trends, technology and change, the job, manpower market, the student, nature of work, skills and the economic value of education, and decision making and planning. Each lesson includes discussion questions and concludes with a lesson summary. (LJ)

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JOB OPPORTUNITIES AND YOUTH

Parkrose Fremont Junior High
Parkrose Heights Junior High
Marycrest High School

1972

An Exemplary Project in Vocational Education

Administered by

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VT 102207

WORLD OF WORK

WORLD OF ECONOMICS

Wages, Earnings, and Family Income

Wages are the financial rewards of work. Of the total National Income, nearly three-fourths is paid each year to workers as "Compensation of Employees". These wage earnings are the most important source of income for most families. Hourly wages, weekly earnings, and annual income vary greatly among workers and families. These wage and income differences are significant because there are strong linkages in our economy between jobs, earnings, consumer buying power, and levels of living.

* * * * * * * * * *

One reason why people work is "to make a living." In the input market workers exchange their manpower for wages so they will have money to spend for the purchase of goods and services as consumers in the output market. ("Wages" is a general term that includes all forms of labor income--hourly wages, salaries, sales commissions, bonuses, personal fees, etc.)

Almost three-fourths of total National Income is paid regularly to the nearly 80 million peoples who contribute manpower to the productive process. In 1966, Compensation of Employees amounted to $433 billion, or about $6,000 per worker. (If you count in the labor income of self-employed businessmen, farmers, and professionals, the total would be even higher.)

Peoples who do different kinds of work get different rates of pay. This should not be surprising, since jobs differ in level of difficulty; the education, skills, and experience required; hours and working conditions; location; and in many other ways. And there are also differences in the relative supply and demand for workers with particular qualifications. (If the supply of farm workers, for example, is relatively high, while the demand for such workers is relatively low, we would predict that wages will be low.)

In the early months of 1970, the average production worker in manufacturing earned $3.36 per hour and approximately $133.73 per week. The average construction worker earned $5.25 per hour and nearly $196.35 a week. The average employee working in retail trade (sales clerk in a department store, checker in a supermarket) earned $2.44 per hour and $82.47 per week. (Many workers employed in hotels, restaurants, textile mills, and laundries earn less than $2.00 per hour.)

Professional, business, and technical workers generally receive the highest pay, while laborers, farmers, and service workers get lower pay. Future lessons will focus attention on just exactly how much money that people with different levels of education and skill earn in various occupations and industries.

* * *

Wages and earnings have increased a great deal for American workers in the past 20 or 30 years. Back in 1929--when your grandfathers were starting their work careers--60¢ an hour was considered to be a pretty good wage. Average weekly earnings for employees in manufacturing was $24.76. In the depression of the 1930's, average earnings fell to $16.65 a week. Coal miners earned even less.

But in the 1940's, wages more than doubled, and by 1954, average earnings in manufacturing reached $70 per week. However, since prices rose during World War II and afterwards, part of the increase in money wages was eaten up by inflation. Nevertheless, real wages--wages measured in dollars having a fixed buying power, after all adjustments for inflation just about doubled between 1940 and 1966. Each hour of labor today earns twice as much real buying power as it did 25 years ago.

* * *

We said that wage earnings are the most important source of income for most families. Some families receive income from other sources--dividends on shares of stock they own, interest on savings bonds, government transfer payments (such as Old Age, Survivors, Disability, and Health Insurance benefits under the social security program). (Also note that since many families have more than one wage earner average family income is greater than the average earnings per worker.)

In 1969, the average (median) family in the United States received an income of $9,433. This means that half of the 48 million families in the country had incomes above $9,433 and half had incomes below $9,433. It is interesting to note that eight million families had incomes below $3,000 per year--which put them in the "poverty" category, according to income standards set by the federal government. (The statistics given here apply only to families having two or more members. Figures for "Unrelated Individuals" are not included.)

In Oregon, income per person in 1970 was $3,700. That is if you took all the income received by all of the people in Oregon and added it together, and then divided by 2 million (which is the number of people living in Oregon) the average (mean) income would be $3,700 per year. This was $200 below the national average and placed Oregon 23rd among all states.

* * *

We have said in earlier lessons that there are three big questions that every economic system must answer:

1--What should be the overall level of economic activity?
(How much to produce?)

2--What kinds of goods and services should be produced?
(What to produce?)

3--How should the nation's income be distributed?
(For whom to produce?)

This third question means: how should the income that is produced by the economy be shared among the families and individuals that make up the economic society? How should the money income be divided? (Since distribution of money income determines the distribution of buying power, it also determines the quantities of goods and services that various consumers can purchase.)

* * *

If the total Personal Income in the United States were divided equally among all family units (even including one-person units), the income per family would be just under $16,000 a year. Income is not equally divided in the United States, so instead of all families receiving $16,000 a year, only about one-fourth of the families get this much income. Table I shows how income actually was shared in the United States in 1969.

Table I. SHARE OF INCOME RECEIVED BY EACH FIFTH OF U.S. FAMILIES, 1969

		% of Total U. S. Income
Lowest Fifth	(under $3,900)	4
Second Fifth	($3,900-5,810)	11
Middle Fifth	($5,810-8,690)	17
Fourth Fifth	($8,690-12,200)	23
Highest Fifth	(over $12,200)	45
TOTAL		100%

SOURCE: U. S. Department of Commerce
Statistical Abstract of the U.S. 1971 P. 317

The table shows that if we divide all families in the United States into five groups, according to the amount of income they received in 1969, the lowest group--made up of 10 million families, with approximately 40 million people--got only 4% of the nations' income. The highest group--the 10 million families at the top of the income scale--received 45% of all the income. So the top group got eleven times as much income as the bottom group.

Families in the top income group are frequently headed by a professional or technical worker, or by a business manager. Families in the lowest group are very often headed by unskilled workers, farmers, or men or women who are not employed at all.

* * *

Questions: Do these statistics on wages, earnings, and family income surprise you? Do you feel that the distribution of income in the United States is just about the way it ought to be? Could you make an intelligent study of income distribution without the aid of economic statistics?

* * * * * * * * * *

Today's Lesson in Brief

Workers receive nearly three-fourths of total National Income every year as their payment for contributing manpower to the production process. There are great differences among workers and families in terms of hourly wages, weekly earnings, and annual incomes. The average production worker in manufacturing earns about $3.36 per hour ($133.00 per week). The median FAMILY in the U. S. receives nearly $16,000 of income per year. If all families are ranked according to the size of their income, the top one-fifth of all families gets 45% of total income, while the lowest one-fifth gets 4% of total income.

The Role of Labor Unions

Although labor unions have existed in the United States for more than a century, they did not become a solid fixture in our economy until the 1880's; and membership was small until the 1930's. Unions were organized to give workers a stronger voice in dealing with employers regarding wages, hours, working conditions, and job security. Today 20 million men and women, about one-fourth of all American workers, belong to unions. The AFL-CIO is a federation of labor unions that serves as a national spokesman for union members.

☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆

"Organized labor"--sometimes called "the labor movement"-- is an important institution in the American economy. These terms refer to the organization of workers into unions, and then linking these unions together through cooperation, and sometimes formal organization and federation.

A labor union is an association of employees. The purpose of unions is to give men and women who work for pay a stronger influence in dealing with employers. Their motto is: "Through union, comes strength." They use this strength in efforts to gain higher wages, better working conditions, more control over their jobs, and improvements in the social and economic life of the working man.

☆ ☆ ☆

We can make good use of history as well as theory and statistics to help us understand the institution of unionism as it exists today. Let's look back in history to see the kind of world your grandparents were born into.

☆ ☆ ☆

What was it like to be a worker in America in 1900, some 70 years ago? The following description of the world of work at the turn of the century suggests some reasons why workers felt a need to join together into unions.

-- "The average worker made about $10 a week for a 60-hour week. Some textile workers put in as many as 84 hours. More than two million children, some only 12 years old or even younger, worked long hours, frequently at night, for which they were paid no more than 60¢ a day.

-- "For working 12 hours a day--seven days a week--garment workers were paid three or four dollars a week, out of which they often had to pay fines to their employers for talking, smiling, or breaking needles.

-- "The only relief from work came with the lay-off or the firing. And then came the desperate hours of search to find some work, any work--at any pay--just to stay alive.

-- "The places where garment workers were employed were dim, damp, disease-breeding places of labor called sweat shops. There were no regular hours; no minimum wages; no paid holidays; no vacations; and no human dignity."

☆ ☆ ☆

The following working rules were imposed on the employees of a Chicago department store in the years just preceding the Civil War (quoted from a handbook for employees, distributed in 1857):

-- "Store must be open from 6 a.m. to 9 p.m. the year around.

-- "Each employee must not pay less than five dollars per year to the church and must attend Sunday school regularly.

-- "Men employees are given one evening a week for courting and two if they go to the prayer meeting.

-- "The employee who is in the habit of smoking Spanish cigars, being shaved at barbers, going to dances and other places of amusement will surely give his employer reasons to be suspicious of his integrity and honesty."

☆ ☆ ☆

Question: How do you think a worker today would feel about the conditions and rules described above?

☆ ☆ ☆

Attitudes regarding workers and unions were quite different in the early 1900's than they are today. When railroad workers were trying to build a strong union and bargain with management over wages and working hours, the president of the railroad in 1903 made the following statement:

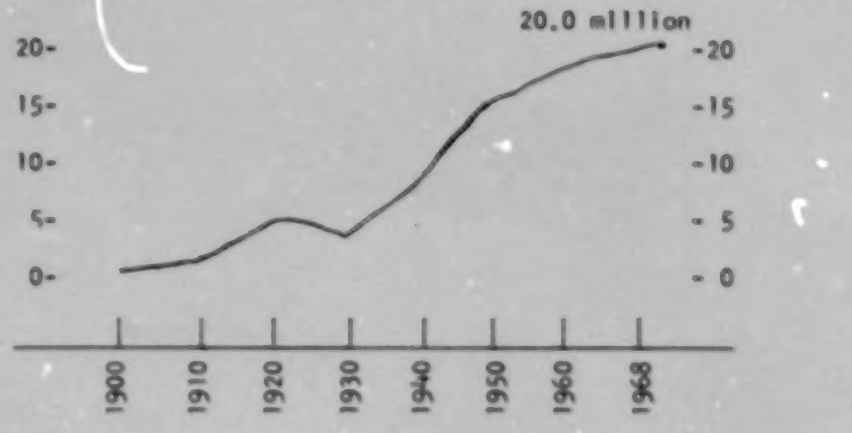
> "The rights and interests of the laboring man will be protected and cared for, not by the labor agitators, but by the Christian men to whom God in His infinite wisdom has given control of the property interests of the country. Pray earnestly that the right may triumph, always remembering that the Lord God Omnipotent still reigns and that His reign is one of law and order, and not of violence and crime."

☆ ☆ ☆

Throughout most of our nation's history, business and goverment both opposed labor unions--sometimes using the police, National Guard, and armies of "private detectives" to break up strikes and prevent efforts to organize unions. The individualist outlook of the American people was another factor that prevented unions from being formed. For many years, public sentiment was definitely not in favor of labor unions. As a result, union membership was small.

Chart I shows total union membership in the United States from 1900 to 1968.

Chart I. TOTAL UNION MEMBERSHIP IN THE UNITED STATES 1900-1968
(In million.)



SOURCE: Statistics of the United States, p. 97f.
For 1960 and 1968, Statistical Abstract of the U.S. 1971, p. 233

Notice the sharp increase in members during the 1930's and 1940's. How is this to be explained?

Two factors provide most of the explanation for the growth of union membership after 1930. First, our economic system suffered its most severe breakdown in history. The Great Depression caused millions of workers to be unemployed. From 1932 to 1935, the unemployement rate never fell below 20%, and in the worst year, 1933, one worker out of every four was jobless. The American people lost confidence in the business system and looked for new ways, including unionism, to improve the economy.

The second factor was a change in the attitude of government. President Franklin Roosevelt publicly stated that "If I were a worker in a factory, the first thing I would do would be to join a union." In 1935, Congress passed the National Labor Relations Act (Wagner Act), guaranteeing workers the right to organize unions and bargain collectively with employers, without interference from management. Employers now were legally required to bargain in good faith with any union certified as a bargaining agent.

There have been many changes in the law dealing with unions since 1935, and some of these new laws have been designed to limit the power of unions and also to make unions more responsible to their members and to the public. But today, unions are a solid fixture in our economic world. As President Dwight Eisenhower said in the 1950's, "Only a fool would try to deprive working men and working women of the right to join the union of their choice."

Even today, however, only 20 million men and women, about one-fourth of all workers in the United States, belong to unions. But totals can be misleading. In certain industries unions are very strong and almost all workers are union members. In 1968, more than two-thirds of all workers in the transportation and construction industries were union members. At the other extreme, only about one-twentieth of the workers in service industries, state and local government, finance and insurance, and retail and wholesale trade belong to unions.

A few national unions are very large. In 1968, the Teamster union (truck drivers, etc.) had 1.8 million members; the Automobile Workers had 1.5 million members; and the Steelworkers, Machinists, Electrical Workers, and Carpenters were not far behind. The size and influence of some of these unions can be compared with the giant corporations that they bargain with in labor negotiations, such as General Motors, Ford, U. S. Steel, General Electric.

* * *

What is the structure of organized labor in the United States? In general, there are three "layers" of union organization. First there is the local union that exists within a particular factory or office building. Above the local is the national or international union (some are called "international" because they include Canadian workers). It is the national union that has much of the collective bargaining power, especially in an industry like steel or automobile production. At the top is the AFL-CIO federation. The AFL-CIO (American Federation of Labor and Congress of Industrial Organizations) is not really a union, and does not engage in collective bargaining with employers. It is an association or federation of more than 100 unions, and serves as the chief spokesman for organized labor on such national issues as federal taxes, the war on poverty, and the election of the President and members of Congress.

At the state and local level, there are labor councils or "central bodies" that represent organized labor in political affairs, educational activities, and a variety of other areas. The Oregon AFL-CIO has its office and staff in Portland.

* * *

ADDENDUM:

Portions of MANPOWER AND ECONOMIC EDUCATION: Opportunities in American Economic Life have been used in compiling this student manual. Permission to use this material and update it has been granted by the authors (Robert L. Darcy and Phillip E. Powell).

What is the future of labor unions in America? This is a question that many people are asking. Some say that unions played their most important role in the 1940's and 1950's and now there is less need for them. With the spread of automation, however, many workers have turned to their unions to help protect their jobs and incomes. They feel that unions will play an important role in helping them achieve their goals of economic security.

There are many who predict that unions will continue to play a major role in determining wages and working conditions and will assume positions of great importance in new fields--particularly with white collar workers. Unions of public school teachers, for example, have grown up in recent years and have attracted attention across the country.

* * *

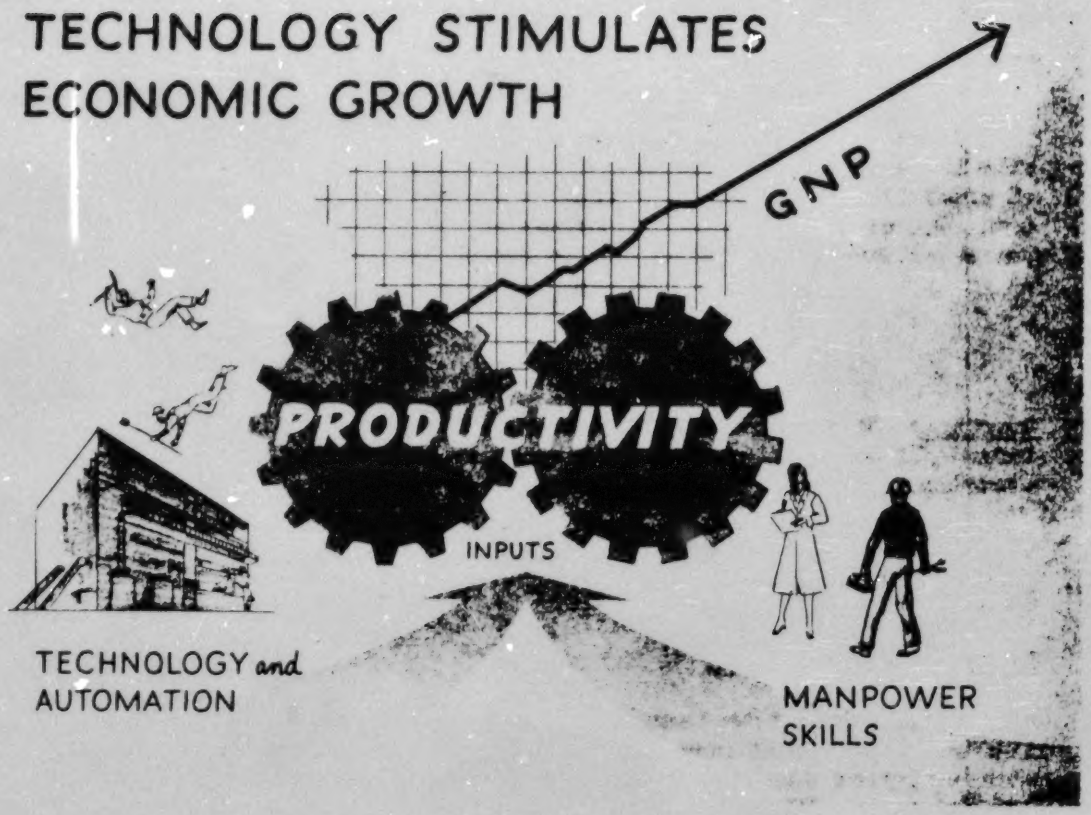
Question: Do your parents, or other members of your family belong to a union? If so, what views have they expressed about the advantages and disadvantages of belonging to a union?

* * * * * * * * * *

Today's Lesson in Brief

Labor unions have been a solid fixture in the U. S. economy since the 1930's. Their chief purpose is to give workers a stronger voice in dealing with employers over such matters as wages, working conditions, job security, and fringe benefits. Today 20 million men and women, nearly one-fourth of all American workers, belong to unions. Workers are represented by local unions, national unions, and by the AFL-CIO, which is a national federation of unions.

TECHNOLOGY STIMULATES ECONOMIC GROWTH



Technology creates both opportunities and problems for labor unions and their members. A growing economy with rising GNP creates more jobs. Increased productivity often brings higher wages. However, technological change and greater productivity may sometimes reduce the number of workers employed. Advancing technology frequently requires workers to learn new manpower skills.

OCCUPATIONS AND EMPLOYMENT TRENDS

Are Today's Skills Good Enough for Tomorrow's Jobs?

In the dynamic economy of the United States, change is always taking place in the number and nature of jobs in the manpower market. Technology and other forces cause some old jobs to disappear while creating new jobs. The changes that will take place in the manpower market during your lifetime will mean that you are likely to have three, four, or even more entirely different types of jobs during your years of employment. Continuing education and training will be necessary to keep your work skills up to date, so you can take advantage of changing employment opportunities.

* * * * * * * * * *

In many cases, your parents did not have the opportunities for education and training that are available to young people today. Yet, many have been able to get and hold jobs without a great deal of additional education or training. Can you safely assume that "what was good enough for Mom and Dad will be good enough for me?" Don't bet on it!

The future will be different from the past. Our labor force is changing rapidly in composition and the amount of education and training that every type of worker has is increasing. However, because of the rapid nature of change in our labor force, it's hard to predict the specific skills needed for the jobs of the future. The fact is that not even the panel of vocational education experts set up by the President of the United States* could answer the question: "What skills should people be trained for so they can be usefully employed 10 years from now?" We have reached a point in our economic life where we can't really tell whether a given form of training will carry a man or woman as much as 10 years in time.

* * *

Let's look at the future of education and training for our changing labor force through the eyes and voice of a girl named Susie. The story could very well concern itself with Joe, Pete, or Bill because what happens to Susie in tomorrow's manpower market could happen to the boys in this class as well as the girls. As you read this case, ask yourself:

1. What would I do if I found myself in Susie's situation?
2. What "mistakes" did Susie make?
3. How can I avoid the situation that Susie is in?
4. Who (or what) is to blame for what happened to Susie?

* * *

*A 24-page summary of the Panel's 1963 report, Education for a Changing World of Work, was published by the U. S. Government Printing Office.

Susie, a ninth-grade student in Everytown Junior High School, in the Spring of 1969 had come to the office of Mr. Collins, the school's guidance counselor, to discuss her high school program for next fall.

In talking to Susie, Mr. Collins recalled that Susie's mother had asked, "What's going to happen to Susie when she gets out of high school? Is she just going to be pushed into marriage because she has nothing better to do? I hope she has a chance to work out her own future and take time to decide what she wants to be."

With this in mind, Mr. Collins said, "You know, Susie, around here one of the best jobs a girl can get is in an office. In this town we need people who can type and keep books and manage offices. If you take the commercial subjects, I don't think you'll have any trouble getting a job when you graduate."

"Well, that sounds all right," said Susie. "What do you think I should take?"

"You are required to take English, social studies, and physical education. You could also take some home economics, and of course typing, shorthand, and bookkeeping." So they laid out a program in which about a quarter of her high school time would be spent on commercial subjects.

Three years pass, and in 1972, Susie graduates. Now her parents say, 'We don't think you should get a job yet. You ought to go to junior college."

So Susie goes to junior college. There she spends about a third of her time on commercial subjects. She is good at them, and she likes them. Her spirit and her willingness to learn make her well liked by her teachers and a genuine credit to the college.

Two more years go by, and in 1974 she graduates and takes a job with the J. B. Jones Insurance Agency. Here, too, Susie turns out to be a real whiz. At the end of the first month she gets a raise, and at the end of the second, another.

And then one day Mr. Jones runs into the president of the board of education at a Rotary Club luncheon. "Hey, Joe," he says, "I must have been wrong about your schools. I always thought you guys were a bunch of parasites living off American business, but when I see what that Susie is doing in our company--well, she's the best girl we've ever hired for that sort of work. Believe me, friend, if you're turning out people who can perform like that, you can count on old J. B. to help you out when you need it."

Joe is delighted and hunts up the superintendent. "Jack, did you hear what old J. B. Jones is saying about us?" he asks, and tells him the story.

"That's interesting. I have a letter here which I just received from that girl's folks." He reads:

"DEAR DR. SMITH: We want you to know that we think the wonderful adjustment our daughter has made comes directly from the things you and your school did for her. We wish there were some way we could help to make this possible for other children. If there is anything we can do to support your program, please do not fail to call on us."

Months go by. Susie gets more raises. She is successful and happy.

Then she meets "him." She is now 20 years old; it is 1975. She falls in love and decides she wants to get married.

But Mr. Jones says, "Now, Susie, don't do anything rash. You've got a good job here, with an excellent future. Don't throw it away."

Susie is not the kind to do anything too quickly. She waits a whole year. Then she gets married. After her marriage she continues to work. She enjoys working for the insurance agency and the company continues to value her as an employee. But after a little while there is a baby on the way, and Susie tells her employers she will soon have to stop work. Time passes, and eventually she quits work to become a full-time housewife and mother. She is 22 when Johnny is born in 1977.

Susie has two more children, the last born when she is 26. Two years later Johnny starts to school. Susie does not really miss him because the other children keep her busy. But another 4 years go by and (in 1987), when she is 32, the last child enters school.

Now Susie finds that she has more free time. She thinks about getting a job and talks to her husband about it, but he says, "No wife of mine has to work. Why don't you join a church group or a bridge club?"

She does join a bridge club, but decides playing bridge is not a worthwhile pastime and gives it up. She takes on a Scout den, but doesn't like it. She joins a church group and for a while does volunteer work at the Y, but she finds nothing she honestly likes to do. She becomes restless and unhappy.

More years pass, and suddenly a crisis looms which none of them had seen coming. Johnny enters high school. This was not unforseen, but with Johnny actually in high school things seem different. His future education looms nearer. Susie tells her husband, "Johnny ought to go to college. If he does, we're going to need about $2,000 or $3,000 a year more than we make now. And the other two are coming on Don't you think I should get a job?" It is now 1989. Susie is 34 years old.

Susie goes back to the Jones Agency to try to get her job back. Old J.B. is dead, so she introduces herself to the new boss and says, "I used to work here about 13 years ago."

He says, "Well, that's wonderful. What can you do?"

"I can keep books."

"Keep books? Did they hire bookkeepers in your day? We don't keep books in this office; that work's done on a machine. This is 1989!"

"Well, I can take shorthand."

"Did they hire stenographers in your day? I always thought that was done with dictating machines."

"I can type."

"We use the voice typewriter now."

"Well, I can manage an office."

"Look, Susie, do you see those six women in there? Each of them has 20 years seniority with this company. Quite literally, they are charity cases. The only reason those women are here is because they have seniority. Any one of them could manage this office with one hand."

"Then what can I do?"

"Can you program a computer?"

"What's that?"

"Can you use binary numbers?"

"What are they?"

"Susie, are you educated?"

"Of course I'm educated! I went through junior college!"

"Well, you don't sound as if you are. Maybe you'd better look into that."

So Susie goes to the college and tells them she finds she needs more education. She wants to get her bachelor's degree now.

The admissions office looks up her records. "You know," he says, "We don't teach those commercial subjects any more. It's good that you took typing. We don't credit typing courses, but we require all students to type everything. Our professors don't have time to try to figure out their handwriting. However, I'm not sure we could admit you to this college now."

"Do you mean I can't get back into college? I've already had 2 years. Here, I've got a certificate which says I graduated from this very school."

"Yes, but this college isn't the same as that college was. Students are required to prove their ability to study our courses. They take entrance exams in communication, both spoken and written, and in science and mathematics. There is also an examination on general background knowledge. You can arrange to take the exams next month."

Susie is shocked. It has been a long time since she has taken any examinations. But she wants to continue her education, so she signs up. When the grades come, though, her spirits fall. She passes the communication test by the barest margin. She fails to get high enough scores on the math-science and on the general background examinations. The admissions office tells her that she will have to study at night school to prepare for later tests.

"You mean I have to go back to high school? Why, that's foolish," and she storms out, saying to herself, "I don't see how I could get into a mess like this. I'm going back to see Mr. Collins."

Mr. Collins is living in retirement. But when he answers Susie's ring, he recognizes her immediately. "Susie, it's wonderful to see you. Come in. What brings you here?"

"Mr. Collins, I'm in deep trouble. I don't see how I can work it out." She tells him her problem. "How could anyone have such a wonderful start and end up in such a mess?"

The old man nods. "Susie, I want to show you something." He gets up and takes her across the room to show her a framed letter hanging on the wall. Susie reads it:

"OCTOBER 1, 1974.

"DEAR MR. COLLINS: I've just had my third raise. I want you to know that I think all my success comes directly from what you and your school did for me. I am so deep in your debt that I could never repay you.

"Gratefully,

"SUSIE."

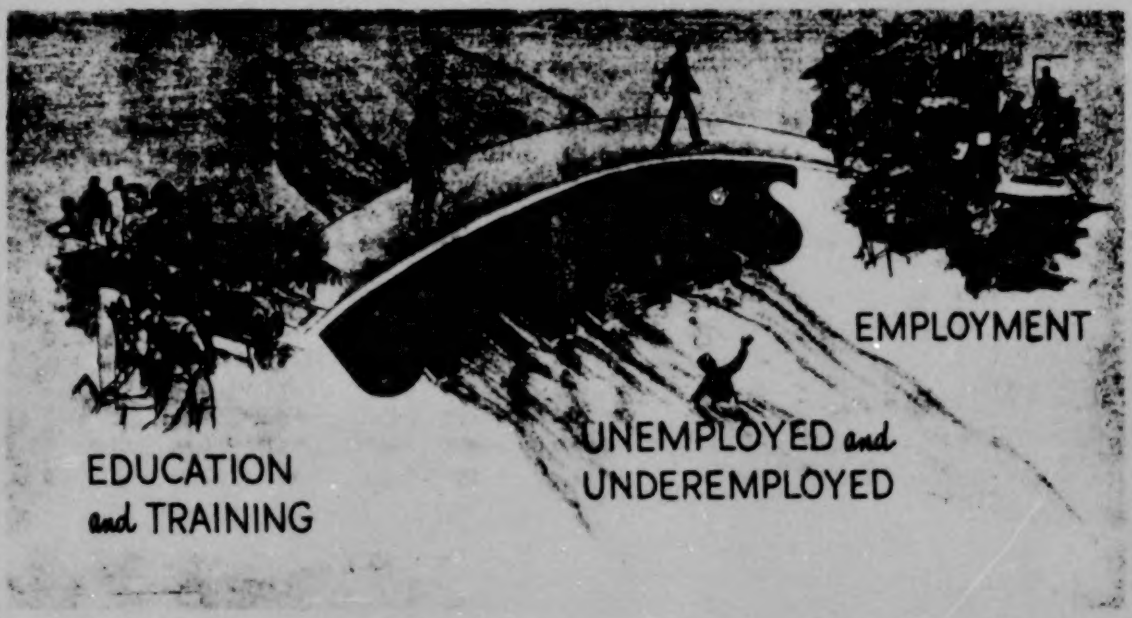
* * *

What did you learn from Susie's case? That middle-aged women will have difficulties in the future getting back into the labor force, (or even into school)? That present job skills may become obsolete? Susie's situation may have made you aware of the need for additional and continuing education to avoid becoming an "obsolete human resource." (After all, new machines and equipment are required by industry as technology advances. In the same way, the economy needs human resources with new skills and know-how.) To obtain the skills that you'll need to compete for tomorrow's jobs, continuing education will be essential. This continuous education and training will require your time and energy and in some cases, your money. (Remember--there's no free lunch.) But the result of continuing investment in your own skills and abilities will be to increase greatly your chances for continuing success in the manpower market.

* * * * * * * * *

Today's Lesson in Brief

Many of today's specific occupational skills will not be good enough for tomorrow's jobs. Each man and woman entering the manpower market in the 1970's can expect to have three or four or even more different jobs during his productive lifetime. Only through continuing education and training can we prepare ourselves to meet the challenge of change in the world of work.



Finding the Trees in the Employment Forest

The operation of the American manpower market involves the activities of over 80 million workers, employed in thousands of occupations. To start planning and preparing for employment, you'll need to find a way of examining the many different types of jobs that exist in the economy.

- In what types of occupations are workers in our economy employed?
- How are jobs classified according to particular occupational groups?
- How many workers are employed in each of the occupational groups?
- How are workers classified according to industrial groups?
- How many workers of various types are employed in each industrial group?

The next few lessons will help you answer these questions, starting with information on how occupations and industries are classified and data on the number of workers employed in the various occupational and industrial groups.

* * * * * * * * * *

Let's begin our examination of the multitude of jobs in our economy by looking at one way of summarizing these jobs--putting them into meaningful groupings. We will also try to get an idea of the number of people in the various occupational groups.

One way of classifying jobs and workers is to take all the different jobs in the economy and label them white-collar, blue-collar, service, or farm occupations. An occupational group contains a number of different jobs which have similar broad characteristics such as entrance requirements, potential earnings, or "a way of life and labor."

WHITE-COLLAR workers, for example, are distinguished not only because they wear "white-collar" clothes, but also because they work in occupations that are centered in offices, laboratories, classrooms, stores, and salesrooms. In general, these workers do not normally depend on their manual or physically manipulative skills to perform their work. Rather, their work involves a relatively high degree of mental and communication skill and is characterized by dealing directly with people, their property, or their records. They teach us, keeps us healthy, manage our enterprises, handle our legal problems, design our bridges, create our knowledge, and look after our accounts.

In 1970, out of a total employed work force of 85 million, over 38 million men and women (48% of total employment) were employed in the white-collar occupations. More than half of all women employed in 1970 were

working in white-collar occupations. For men the comparable figure was 41%.

What is the breakdown (subgrouping) of these white-collar jobs? Professional and Technical Workers accounted for 11 million of the white-collar jobs in 1970; there were 14 million Clerical Workers; there were 8 million Managerial Workers (managers, officials, and owners); and nearly 5 million Sales Workers.

* * *

BLUE-COLLAR or manual workers include three different occupational groups:

1--skilled workers (craftsmen, mechanics, repairmen, and foremen).

2--semiskilled workers or "operatives" (machine operators, assemblers, drivers, and inspectors).

3--unskilled workers (laborers).

Blue-collar workers are distinguished by wearing "blue-collar" clothes to work. They use physical or manipulative skills, working primarily with their hands; and they work more with things than with people. Manual workers help transform the ideas of our scientists, engineers, managers, and administrators into goods and services. They operate equipment, build, control, repair, move, wrap, pack, and unload. They provide most of our manpower "muscle." In 1970, 35% of all employed workers were working in blue-collar occupations. The 28 million blue-collar workers in 1970 were employed as follows:

* Semiskilled Workers .... 14 million
* Skilled Workers ..... 10 million
* Unskilled Workers ..... 4 million

TOTAL BLUE-COLLAR WORKERS .... 28 million

* * *

SERVICE occupations, which employed 10 million workers in 1970--13% of total employment--include jobs that provide protective, personal, building, maintenance, and private household services to individuals, organizations, and the community. Service workers feed us in restaurants, cut our hair, babysit, put out our fires, and clean our buildings. Almost one-quarter of all women workers in 1970 were employed in this occupational group. On the other hand, only 7% of the total number of men employed in 1970 were working in service jobs.

FARM WORKERS include farmers, and farm managers, laborers, and foremen. These workers are employed in producing food and fiber on the farms

in our economy. In 1970, 3.1 million farm workers were employed, mostly men. (This was 3 million less than in 1960 and only one-third the number of farm workers employed in 1940.)

* * *

One quick way to grasp the relative importance of employment in each of these occupational groups is to note their respective share of the total number of workers employed. This was the breakdown in 1970:

White-collar ---	48.3%	(38 million workers)
Blue-collar ----	35.3%	(27.8 million workers)
Service --------	12.4%	(9.7 million workers)
Farm ----------	4.0%	(3.1 million workers)

Discussion Questions

1. What is an occupation?

2. What do you think are some of the basic differences between white-collar and blue-collar jobs?

3. What type of work do service workers perform?

4. Why do you suppose so many women are employed in white-collar jobs?

* * *

Learning about employment means knowing something about the work place and setting where the job is performed. Almost every occupation can be practiced in a number of different industries and enterprises. To get a better picture of employment in our economy, we can classify industries into nine major divisions. These industrial divisions represent roughly similar lines of economic activity. For example, the nine industrial groups can be divided into two general categories--those that produce goods and those that produce services. The goods-producing industries harvest food and fiber, build houses and office buildings, extract minerals, and manufacture merchandise. The four goods-producing industries are: Agriculture; Contract Construction; Mining; and Manufacturing.

Those industries that produce services are involved in selling, governing, transporting, insuring, financing, producing utilities, housing, repairing, and personal grooming. The five service-producing industries are: Government; Transportation and Public Utilities; Trade; Finance; Insurance; and Real Estate; and Service and Miscellaneous. (Some manpower market analysts refer to employees in the last three industrial groupings as "gray-collar" workers.) In 1970 the goods-producing industries employed 28 million workers (34% of the total number of employed workers). The service-producing industries employed 47 million workers--60% of total employment. (The other 9 million workers employed in 1970 were the self-employed, and the unpaid

family workers. In the 1970's it is clear that our manpower force is occupied more with the production of <u>services</u> than with the production of goods.

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Identify the following industries as either goods-producing or service-producing. Please mark your answer with either a "G" for goods-producing or "S" for service-producing.

Agriculture _____ Government _____

Trade _____ Mining _____

Manufacturing _____ Finance _____

Real estate _____ Construction _____

☆ ☆ ☆

The occupational and industrial classification systems used in this course were established by the U. S. Department of Labor for presenting manpower data. See last page of this lesson.

The dynamic nature of our manpower market is illustrated by the number of changes that take place in the listing of jobs that is done by the U. S. Department of Labor. For example, the 1965 edition of the DICTIONARY OF OCCUPATIONAL TITLES (DOT) includes 6,432 jobs that were not listed in the 1949 edition, and drops many obsolete jobs. (The DOT is a standard reference volume that lists and defines various occupations in the economy and groups these jobs according to basic occupational, industrial, or worker characteristics.)

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<u>Today's Lesson in Brief</u>

Jobs and workers can be classified according to occupations and the industries in which work is performed. These classification systems can be used to investigate and explore the thousands of different occupations in which more than 80 million American workers are employed. Currently, more Americans are employed in White-collar occupations (48%) than in any other occupational group; 36% of our employed labor force works in Blue-collar occupations; 12% are Service workers; and 4% are Farm workers. Looking at employment by industrial classification, we find that 60% of our workers are employed in the service-producing industries, while 40% of our workers are producing goods.

This page provides a summary of the Occupational and the Industrial classification systems (based on U. S. Department of Labor procedures) that we will be using in lessons that follow. You will want to refer to this summary sheet in the future.

SUMMARY OF OCCUPATIONAL AND INDUSTRIAL CLASSIFICATION SYSTEMS

Occupational Classification

WHITE-COLLAR

- Professional and technical workers
- Managers, officials, and owners (nonfarm); sometimes termed Managerial
- Clerical workers
- Sales workers

BLUE-COLLAR: also termed Manual

- Craftsmen and foremen (includes mechanics & repairmen); also termed Skilled
- Operatives (includes assemblers, drivers, and inspectors); also termed Semiskilled
- Laborers (nonfarm and nonmining); also termed Unskilled

SERVICE

- Service workers (includes private household workers)

FARM

- Farm and farm managers (includes farm laborers and foremen)

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Industrial Classification

GOODS-PRODUCING: sometimes excludes agriculture; sometimes termed Production Industries

- Manufacturing (includes durable and nondurable goods)
- Contract Construction; also termed Construction
- Agriculture
- Mining (includes forestry and fishing)

SERVICE-PRODUCING: sometimes termed Services Industries

- Government (includes local, state, and federal governments and public schools); also termed Public Administration
- Transportation and Public Utilities (includes communication)
- Trade (includes wholesale and retail)
- Finance, Insurance, and Real Estate
- Service and Miscellaneous (includes non-public education, medical, and repairs)

On Top in the Service-Producing Era

We are becoming a nation of white-collar workers. The time is approaching when more than half of our workers will be employed in white-collar occupations. Already, more men and women are employed in this occupational group than any other. It is worth-while to look at the various types of jobs these white-collar workers have, note how many men and women are employed in particular white-collar occupations, and see the types of enterprises they work for. Information about white-collar employment can help you plan your own career by acquainting you with the occupations of 44% of America's workers.

* * * * * * * * *

In the last lesson, we saw that 38 million men and women were employed in white-collar occupations in 1970. This is the largest of the four occupational groups--bigger than Blue-collar, Service, or Farm occupations--and accounts for 48% of total employment in the U. S. economy. What kinds of jobs do these white-collar workers perform?

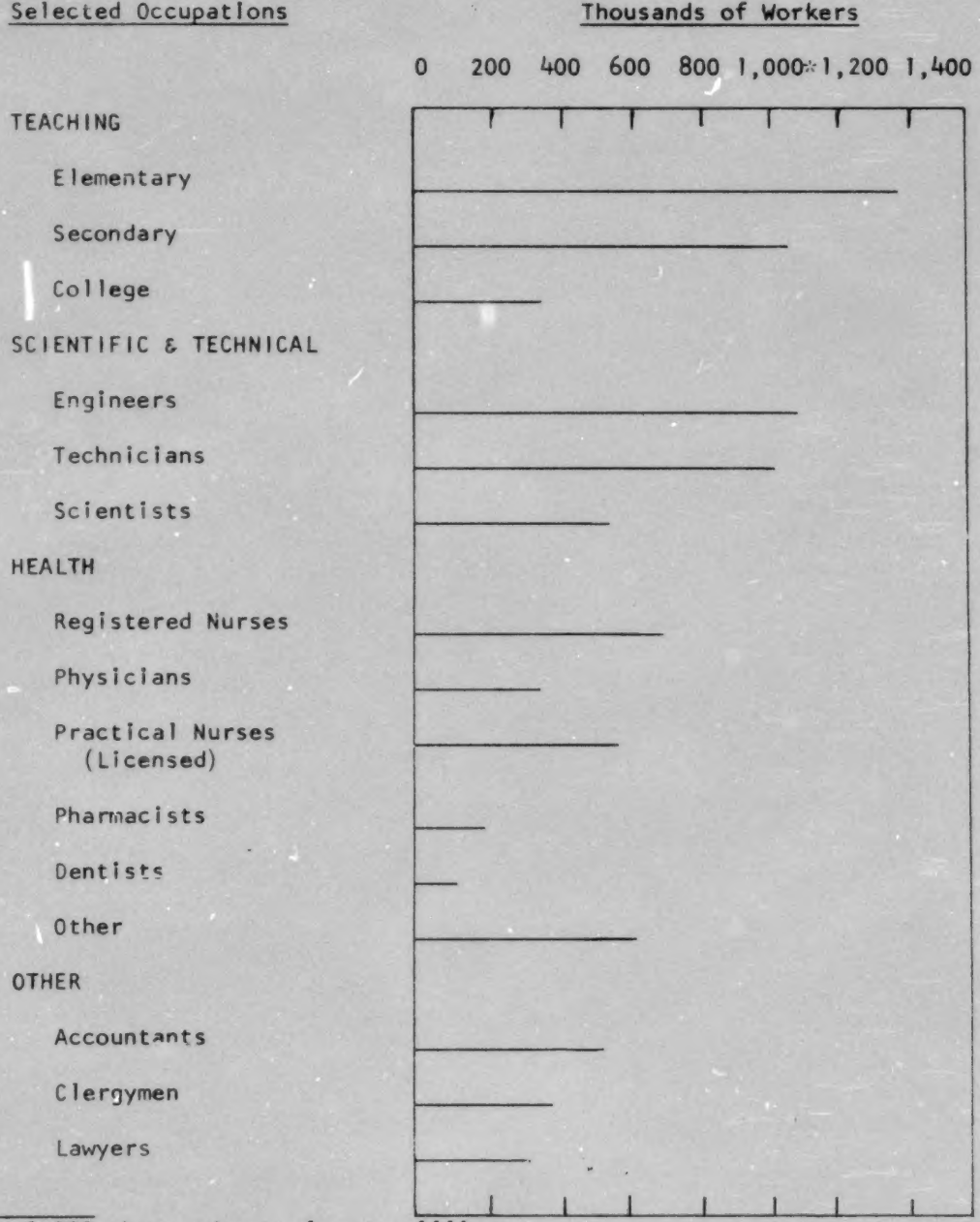
About 11 million white-collar workers in 1970 were employed in Professional and Technical occupations. (That's about 14% of total civilian employment.) These workers held jobs in such professional occupations as physician, lawyer, teacher, and scientist. They also held technical jobs in such occupations as draftsman, x-ray technician, and engineering aid.

One of the chief characteristics of professional work is that it generally required either college graduation--often with an advanced degree such as M.D., D.D.S., and L.L.B.--or experience of such kind and amount as to provide comparable knowledge. Most professional occupations require theoretical knowledge of a specific field such as law, medicine, and engineering. However, there are some professions--such as newspaper or magazine editor, musician, and actress--that do not require as much specialized or theoretical knowledge. These professional jobs require a great deal of creative talent and certain skills that are acquired chiefly through experience.

The technical occupations are closely related to the professions. People in these jobs work closely with engineers, scientists, physicians, and other professional personnel. Employment in these technical occupations usually require a combination of basic scientific knowledge and specialized education or training in some particular aspect of technology or science. Such training is usually acquired by the worker through one of the following two methods: attendance at a technical institute, junior college, or other schools; or on-the-job training from a supervisor or a fellow worker who has already mastered the required information and skills.

Chart 1 lists the major professional and technical occupations. It shows, for example, that in 1970 there were two professional occupations--elementary school teaching and engineering--in which a million or more men and women were employed.

Chart 1. EMPLOYMENT IN SELECTED PROFESSIONAL AND TECHNICAL (WHITE-COLLAR) OCCUPATIONS, 1970



*1,000 thousands equals one million

SOURCE: U. S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook, 1972-73 Edition, p. 25.

Questions. Using the data in Chart 1, please check the correct answer.

1-a. There were more than 40 million professional and technical workers employed in 1970. True _____ False _____.

1-b. In 1970, the number of elementary school teachers employed was greater than the combined total of high school and college teachers. True _____ False _____.

1-c. There were more technicians than scientists employed in 1970. True _____ False _____.

* * *

In 1970, about 7 million men and over 1 million women were Managers, Owners, or Officials of the nation's business, governmental, or private nonbusiness enterprises. Approximately 11% of our employed labor force is busy in the administration of the affairs of the various public and private organizations in our society. These men and women, whether working in large or small organizations or for themselves or others, make decisions and see that they get carried out. The soundness of these decisions, and how well they are carried out, has a great deal to do with the success or failure of our enterprises.

Managers and salaried officials account for about three-fifths of all workers employed in this administrative occupational group. Executives and other managerial personnel in business firms account for the largest part of this salaried manager group. However, there are also several hundred thousand people in this group who are officials of federal, state, and local government agencies and such nonprofit organizations as the Red Cross, private Foundations, and Boy Scouts and Girl Scouts.

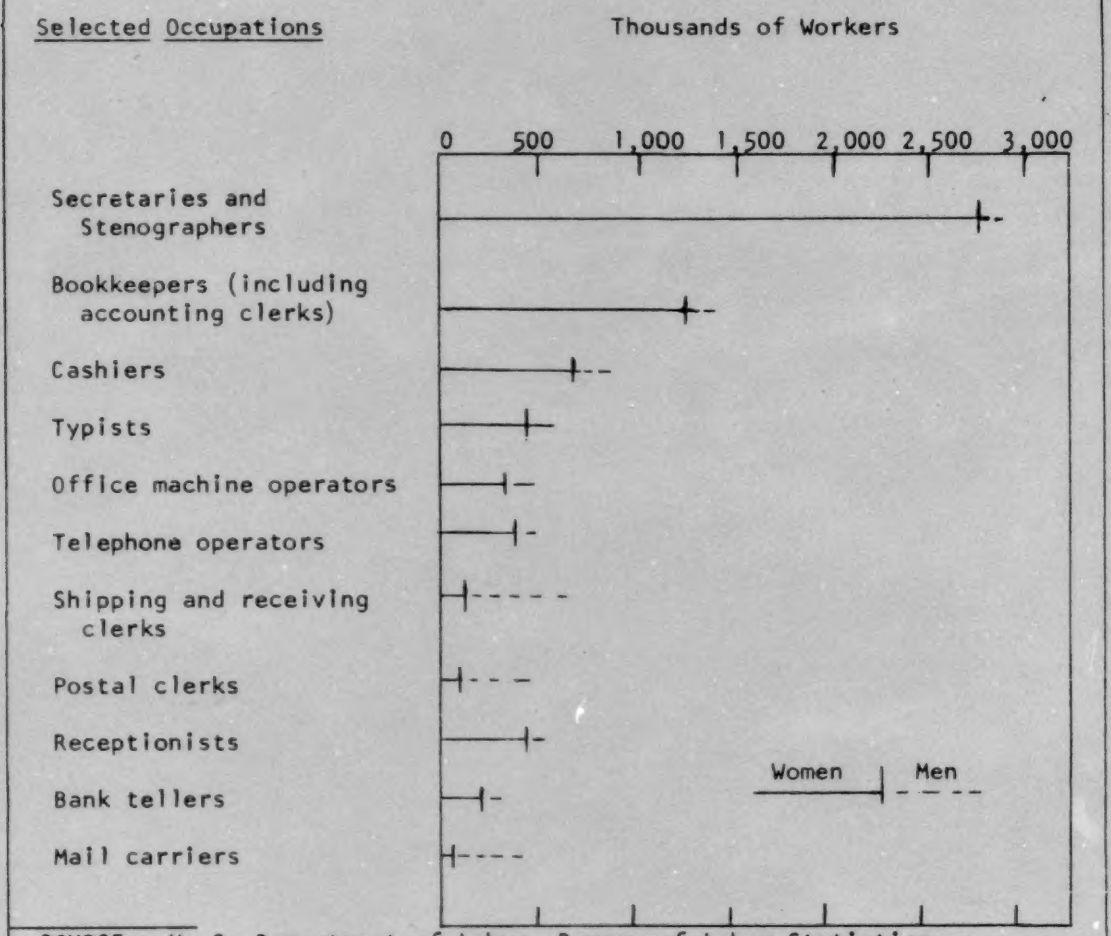
* * *

About 14 million people were employed in Clerical or closely related kinds of work in 1970. In other words, about 18% of total civilian employment is concerned with such activities as record-keeping, paperwork, and other office activity. Clerical workers perform such tasks as handling communication through mail, telephone, telegraph, and messenger services; attending to the shipping and receiving of merchandise; and ringing up sales on the cash registers of stores and restaurants. Their work involves jobs that vary widely in skill and experience requirements, e.g., executive secretaries usually are highly skilled and have a great deal of experience and responsibility. On the other hand, the jobs of messengers and file clerks usually require little skill and experience.

Clerical occupations are dominated by women--seven out of every ten clerical workers are women. In fact, more than half of all the girls who go to work after completing high school, find work in clerical occupations.

Chart II indicates the major types of occupations in which clerical workers are employed, by sex. It shows, for example, that in 1970 more than 2 million men and women were employed as secretaries and stenographers.

Chart II. EMPLOYMENT IN SELECTED CLERICAL OCCUPATIONS, 1970, BY SEX



SOURCE: U. S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook, 1972-73 Edition, p. 283.

Questions

II-1. Why are so many women employed as clerical workers?

II-2. Please check the correct answer.

a. There were in 1970 over a million bookkeepers and accounting clerks employed in the United States. True _____ False _____.

b. Men made up a sizeable portion of the total number of typists employed in 1970. True _____ False _____.

* * *

In 1970, 5 million men and women--6.2% of our employed labor force--were employed in sales and marketing work. Workers in this occupational group sell goods and services for manufacturers, insurance companies, and other producers. They work for wholesalers who stock large quantities of goods that are sold in smaller lots to retail stores. They also sell for drugstores, dress shops, and other retailers who deal directly with the public. A list of the items that sales workers sell would be practically endless--including the entire range of goods and services produced by our economy.

Sales work varies a great deal. It includes people who have less than a high school education as well as those who are college graduates; those who travel in their jobs and those who do not; salaried employees and those who are self-employed; those who sell to business men and those who sell to consumers. Over half of all sales workers are employed in retail selling. One-fourth of the sales workers are employed part-time--usually working less than 35 hours a week. Forty percent of those employed in sales work in 1970 were women--primarily in retail stores. Men provide the greatest share of the sales force in wholesale, manufacturing, real estate, securities, insurance, and other nonretail sales.

Questions

1. Retail selling accounted for more jobs in 1970 than all other types of sales work combined. Please check the correct answer. True ____ False ____.

2. In what type of sales work are women concentrated? Why do you suppose they are not employed in larger numbers in the other sales fields?

3. Of all the white-collar occupations, which ones do you think might offer the best career opportunities for you? Why?

* * *

Let's see if we can summarize what we have learned about employment in the white-collar occupations. We found that 48 workers out of every 100 in the United States have white-collar jobs. Increasingly they are "on top" of the employment pyramid--with expanding job opportunities, higher pay, and greater demands for their skills. Growing emphasis on the production of services as opposed to goods will further strengthen the position of white-collar workers in the manpower market. Eleven million of these white-collar workers are employed in Professional and Technical occupations. These workers need some type of post-high school education or training to perform their jobs. (Teachers, engineers, and technicians represent the largest numbers of workers employed in the professional and technical occupations.) Over 8 million workers--more than one employee in every 10 in the economy--has a job as a Manager, Owner, or Official in our nation's enterprises. Another 14 million men and women--18% of our work force--are employed with record keeping and other paperwork. These 14 million Clerical workers are predominantly women--seven out of every ten. Secretaries and stenographers account for one out of every five jobs in this group. Finally, almost 5 million men and women are employed in Sales work. Better than 50% of them are employed in retail

sales. One out of every four sales workers is employed part-time; and 40% of sales workers are women.

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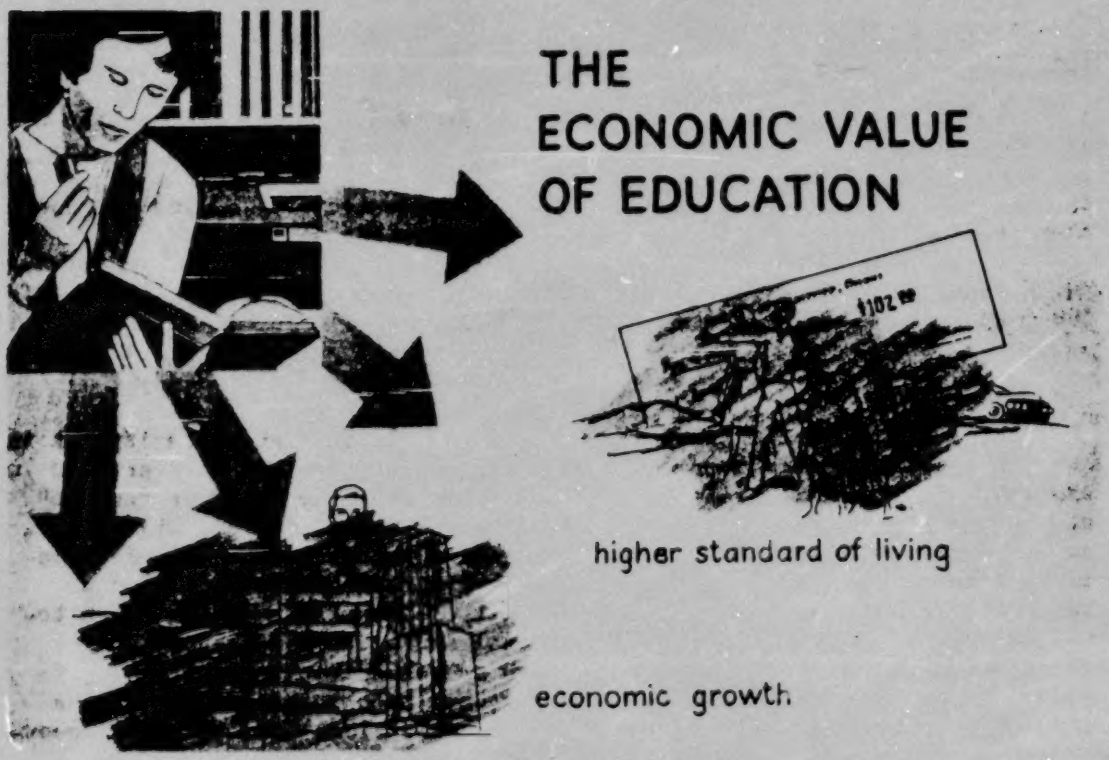
Today's Lesson in Brief

There are more white-collar workers employed in the U. S. economy than any other group of worker. These white-collar workers are employed in Professional and Technical jobs; Managerial; Clerical; and Sales occupations. White-collar workers play a key role in our service-producing era. Professional and Technical occupations and Clerical jobs have the greatest number of white-collar workers. In a number of white-collar occupations, such as office work and retail selling, women play a very important role.



Additional education and training often are necessary to qualify for white-collar employment. In an economy which is increasingly service-producing, these workers make important contributions to economic growth and share in America's rising standard of living.

Farm, Blue-collar, and Service Workers

Farm workers provide us with the food and fiber necessary for our health and comfort, indeed for our very survival. However, Blue-collar and Service workers also provide our economy with essential goods and services. These three groups of workers--Farm, Blue-collar, and Service--all combined, comprise more than half of our total employed labor force; and their skills and muscle are vital to the operation of our economy. In this lesson, we will look at the number of workers in each of the three occupational groups and some of the specific jobs they perform.

* * * * * * * * *

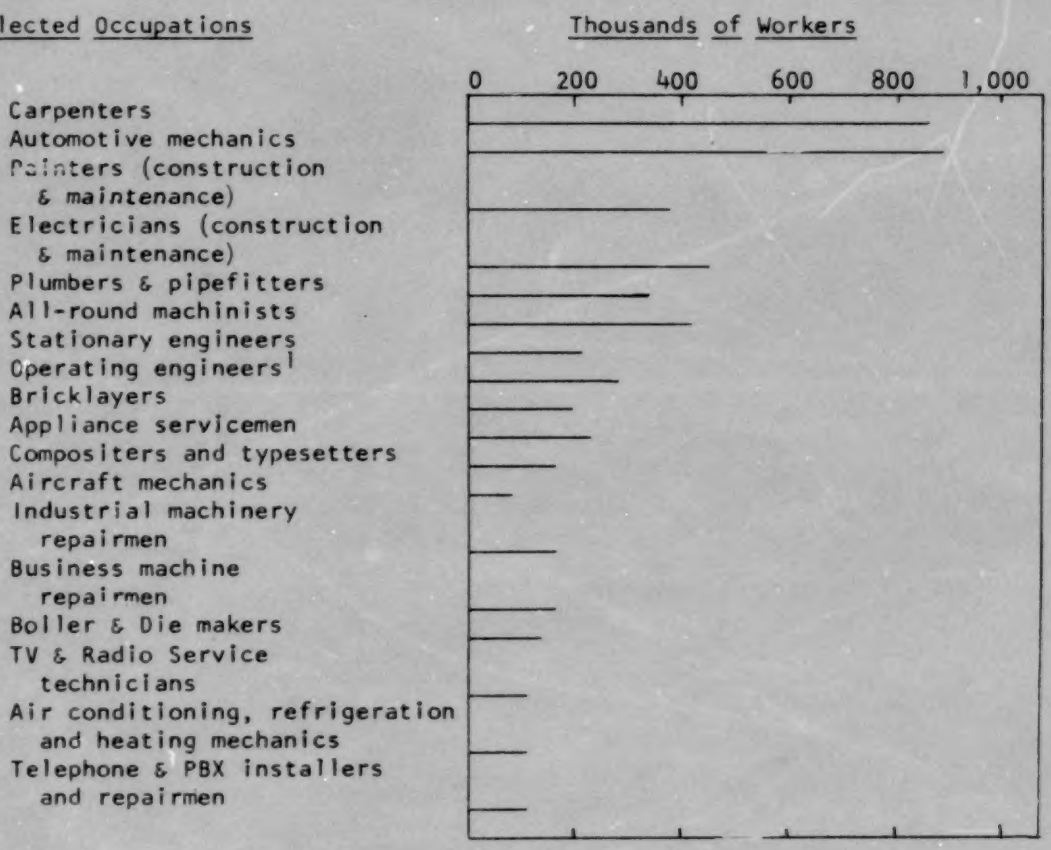
Let's begin our exploration of the employment of farm, blue-collar and service workers in our economy by taking a detailed look at the largest group of the three: the Blue-collar occupations. In 1970, 28 million workers were employed in blue-collar occupations. Roughly one out of every three workers in the entire economy in 1970 was employed in a blue-collar occupation as a skilled, semiskilled, or unskilled worker.

Roughly one-third of all blue-collar workers are classed as skilled. In 1970, there were 10.2 million of these skilled workers employed in the American economy. They include craftsmen and foremen working in the building trades, printers, bakers, those who operate and maintain equipment, repairmen, and workers responsible for making the patterns, models, tools, dies, machines, and equipment without which the industrial process could not be carried on. One-quarter of our skilled workers repair the equipment used in industry and the mechanical equipment and appliances used by consumers. About one-third of our skilled workers are employed constructing homes, commercial and industrial buildings, and highways. In 1970, there were at least 18 different skilled occupations in which 100 thousand or more workers were employed. However, many skilled occupations are small in number. For example, there are fewer than 20,000 workers employed as watch repairmen and paperhangers.

Although skilled workers are employed in almost every branch of industry, more than half are in manufacturing and construction. In the building trades, a large percentage of craftsmen are self-employed. Only a small proportion (about 3%) of the skilled blue-collar workers in our economy are women.

Chart 1 on the next page shows 18 skilled occupations, each of which employed more than 100,000 workers in 1970. For example, it indicates that more than 800,000 carpenters were employed--more than any other skilled occupation.

Chart 1. ESTIMATED EMPLOYMENT IN SKILLED OCCUPATIONS, 1970



[1]Excavating, grading and road machinery operators.

SOURCE: U. S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook, 1972-73 Edition, p. 367

Questions concerning Skilled Workers

1-1. How would you explain the large number of automobile mechanics that are employed in the economy?

1-2. Which of the 18 skilled occupations listed in the chart do you suppose will show the greatest relative growth in employment during the period 1970-75?

1-3. Please check the correct answer.

a. In 1970, there were about 750,000 automobile mechanics employed.
True ____ False ____.

b. Skilled occupations in the construction industry accounted for about one-third of total employment in skilled trades in 1970.
True ____ False ____.

c. There were over 4000,000 machinists employed in 1970.
True ____ False ____.

Now let's look at another category of blue-collar workers--the semiskilled, or "operatives." With nearly 14 million workers, this is the largest occupational subgroup in the nation's labor force. Almost one out of every six workers employed in the U. S. economy in 1970 was in a semiskilled occupation.

In general, semiskilled or operative workers rely primarily on their hands to do their work. Many of these workers use a variety of hand tools such as screwdrivers, pliers, files, soldering irons, measuring devices, and cutting tools. They also make simple adjustments and do minor maintenance work on the machines they operate. Some operatives are also required to keep simple records of their work. Millions of semiskilled workers operate power-driven machines in factories. Many use sewing machines for making clothing, awnings, and other items. Others operate machines to stamp out metal parts; still others use machine tools, such as lathes and milling machines, to shape metal to precise sizes.

A considerable number of semiskilled workers operate equipment that is used in handling and moving materials, such as powered forklift trucks to move raw materials and manufactured products from place to place in factories. Large numbers of semiskilled workers are employed as assemblers and inspectors Assemblers install components into finished products, such as radio and television sets. Inspectors examine and test the products to see if their quality meets specific standards. Many semiskilled workers in factories are employed as helpers to assist workers who are more highly skilled. For example, there are firemen who help the skilled stationary engineers operate and maintain steam boilers and heating plants.

About 9 million semiskilled workers are employed in manufacturing industries principally as machine operators, material movers, assemblers, and inspectors. They help produce such things as clothing, automobiles, food, machinery, and electrical and electronic equipment. Outside of manufacturing the largest single group of semiskilled workers are truckdrivers.

About 30% of all semiskilled workers are women. The number of women operatives employed in the different industries varies considerably. Eight out of every 10 operatives in the apparel industry are women. They also have a good share of semiskilled jobs in the textile and food industries--as sewing machine operators, packers and wrappers, assemblers, and laundry and dry cleaning machine operators. On the other hand, the iron, steel, and petroleum industries employ relative few women in operative jobs.

Questions concerning Semiskilled Workers

1. What percent of workers in 1970 were employed in the semiskilled occupations?

2. What type of workers account for the largest number of semiskilled jobs?

3. Why is the proportion of women smaller in semiskilled occupations than in clerical and sales jobs?

* * *

In 1970 there were 3.7 million unskilled laborers working in industries other than farming and mining. (Unskilled is the third, and last sub-group of Blue-collar workers.) What sort of work do they do? Loading, unloading, digging, hauling, hoisting, wrapping, mixing. Some jobs involve very heavy physical work, but do not require much education or specialized training. Unskilled manual workers are employed mainly in manufacturing firms, on construction work, in wholesale and retail trade, and in transportation jobs.

Question: Why do you suppose there are relatively few jobs for unskilled laborers in today's economy?

* * *

Leaving the blue-collar workers, we turn now to another major occupational group: Service workers. Let's see how many Service Workers there are in the U. S. Economy, and the type of job they perform. In 1970, nearly 10 million service workers were busy policing our streets, serving food, putting out our fires, and helping clean our houses and buildings. They are employed as baby sitters, elevator operators, golf caddies, barbers, and theater ushers. Private household workers, 1.5 million of them, as their name indicates, are employed in private homes preparing and serving meals, making beds, doing cleaning and laundering, and taking care of children. Ninety-seven out of every 100 workers in this type of service work are women. About two-thirds of all private household workers are employed part-time 35 hours or less a week.

Nearly 1 million Protective service workers protect our lives and property from harm or damage. The great majority of these workers are policemen, guards, and firemen, employed by our local, state, or federal governments.

The other service workers--about 6 million in all--comprise a group primarily dealing in Personal and building services. About 2 million of these workers prepare or serve food for us to eat in restaurants, hotels, and institutions. Another 2 million clean and service our buildings. Roughly 600,000 service workers are employed as barbers and cosmetologists.

Questions concerning Service Workers

1. About how many service workers in 1970 were employed as private household employees?

2. Personal and building service workers accounted for about what portion of the total number of service workers employed in 1970? Please check the correct answer. One-third _____ One-half _____ Two-thirds _____ Three-quarters _____.

* * *

The last of the four major occupational groups--after White-collar, Blue-collar, and Service Workers--is the Farm Worker. There is an old song that goes: "The farmer is the man, The farmer is the man, The farmer is the man who feeds them all." Farmers and farm managers, laborers, and foremen are among the most productive and essential workers in our economy. (In the last 20 years, farm productivity has increased at double the rate of the rest of the economy. In fact, the Farmer has been so efficient, he has been working himself out of a job.) In 1970, there were 3.1 million farm workers--1.7 million farmers and farm managers, and 1.4 million farm laborers and foremen. They produce the food and fiber so essential to the consumer's well-being, and which provides raw materials for many American indistries.

Most of the workers on farms are either self-employed farmers or are members of farm families. The number of hired workers on farms (including family members who are paid wages) is subject to seasonal fluctuations. For example, in the month of January there are only about 800,000 hired farm workers employed, while at the peak of the harvest in September, the number will be about 2 million.

* * *

In this lesson we have seen that 3.1 million Farm Workers produce the food and fiber which is so essential to the well-being of the American people. Our physical, social, and psychological welfare is protected and cared for by 10 million Service Workers. Overshadowing these numbers, there are 28 million Blue-collar Workers. Better than one-third of these blue-collar workers are skilled craftsmen and foremen whose work is so essential to the operation of American industry. Almost half our blue-collar workers are semiskilled operatives who run machines, assemble products, drive vehicles, and inspect goods in our factories. 3.7 million unskilled blue-collar laborers provide muscle power for our economy. Together with the nation's White-collar workers, these Farm, Service, and Blue-collar workers perform the many thousands of different jobs required in our highly specialized and interdependent economy.

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Today's Lesson in Brief

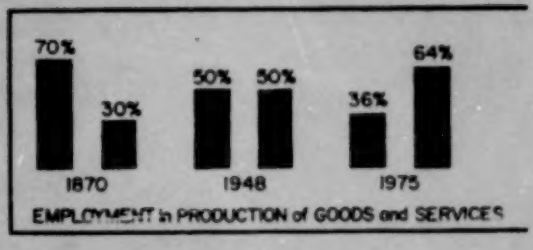
More than one-half of our workers are employed in Farm, Blue-collar, or Service occupations. These workers play important roles in our economy--feeding us, producing our manufactured goods, and serving our personal and protective needs.

THE CHANGING AMERICAN ECONOMY

HUMAN RESOURCES ERA
PRESENT

INDUSTRIAL ERA
1890's-1960's

AGRICULTURAL ERA
TO 1890's



In the Human Resources Era the most important factor of production (or input) for our economy is the brainpower of man. The muscle power that was so important for our past economic development now plays a less significant role. Increasingly, the dominant output of our economy is not goods, but human services. This shift to the production of services influences employment opportunities as shown in the chart above. By 1975 nearly two-thirds of American's work force will be employed in the production of services rather than goods.

They Get the Work Done in American Industry

In this lesson we will summarize some of the data and concepts we have been using to explore the occupational and industrial sources of employment in the U. S. economy, and present additional data in a somewhat different format. Employment in 11 occupational and 9 industrial groups will be examined to compare the number of jobs in each. You can use this knowledge of contemporary employment patterns to identify the sources of jobs in our economy, and in planning your career.

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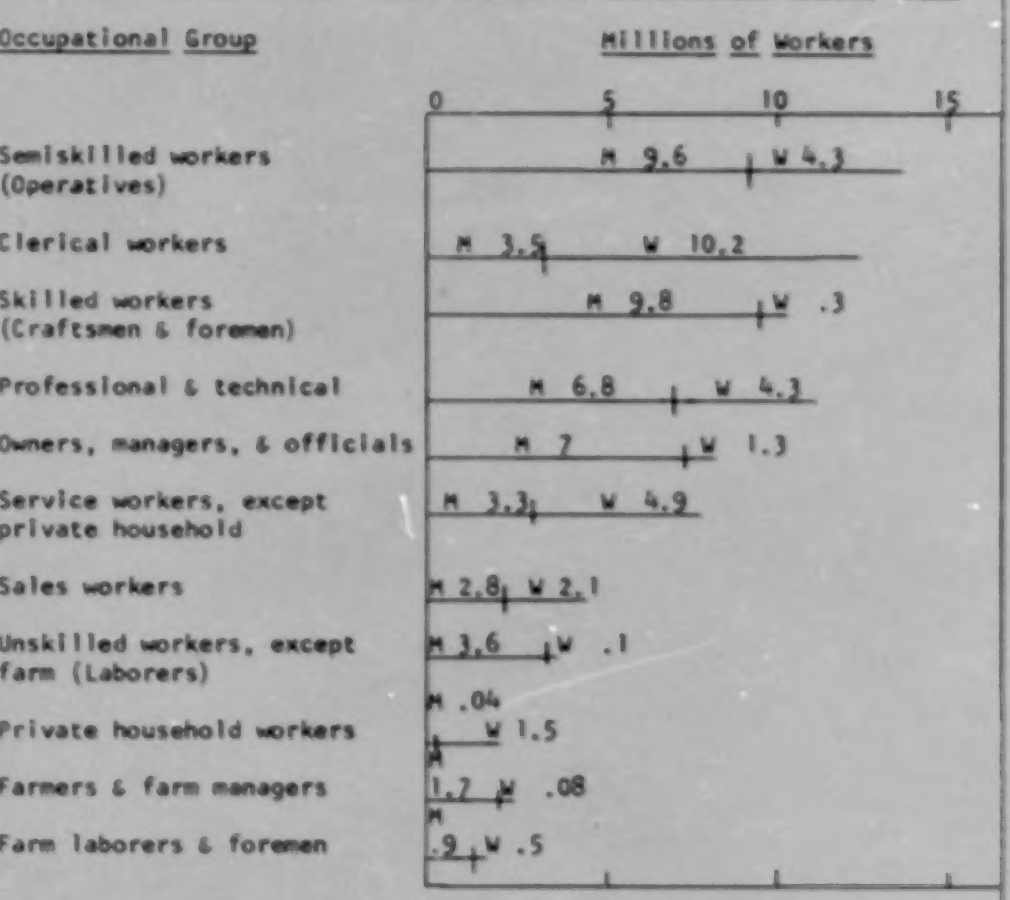
One way we can pick the trees out of the forest of data we have presented the last several days, is--believe it or not--to present some more data. (Still another way to study the occupational and industrial sources of jobs is to take a look at your teacher's copy of the OCCUPATIONAL OUTLOOK HANDBOOK. This book describes jobs and provides a wealth of data on employment by occupation and industry in the U. S. economy.) We will take a look at three charts which show occupational and industrial employment in the United States for a recent year. They will help us identify the relative importance of various occupations and industries as <u>sources of jobs</u>.

Chart I shows total employment, by sex, in the United States in 1970 in each of 11 occupational groups. Semiskilled workers were the largest occupational group in our economy, including 9.5 million <u>men</u> and 4.4 million <u>women</u>. In that year, there were about 1 million more Semiskilled Workers than the second largest occupational group, Clerical Workers.

Chart 1 EMPLOYMENT IN THE UNITED STATES BY OCCUPATIONAL GROUPS, 1970



*To the left of the vertical line, number of MEN employed. To the right of the line, number of WOMEN employed. Length of line = total employment.

SOURCE: U. S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook 1972-73 Edition, p. 16
MANPOWER REPORT OF THE PRESIDENT, 1972, p. 171

Questions from Chart 1

1-1. How many women were employed as Clerical Workers in 1970?

1-2. In what occupational groups were there more than 5 million men employed?

1-3. In what three occupational groups did women represent about 50% or more of all employed workers?

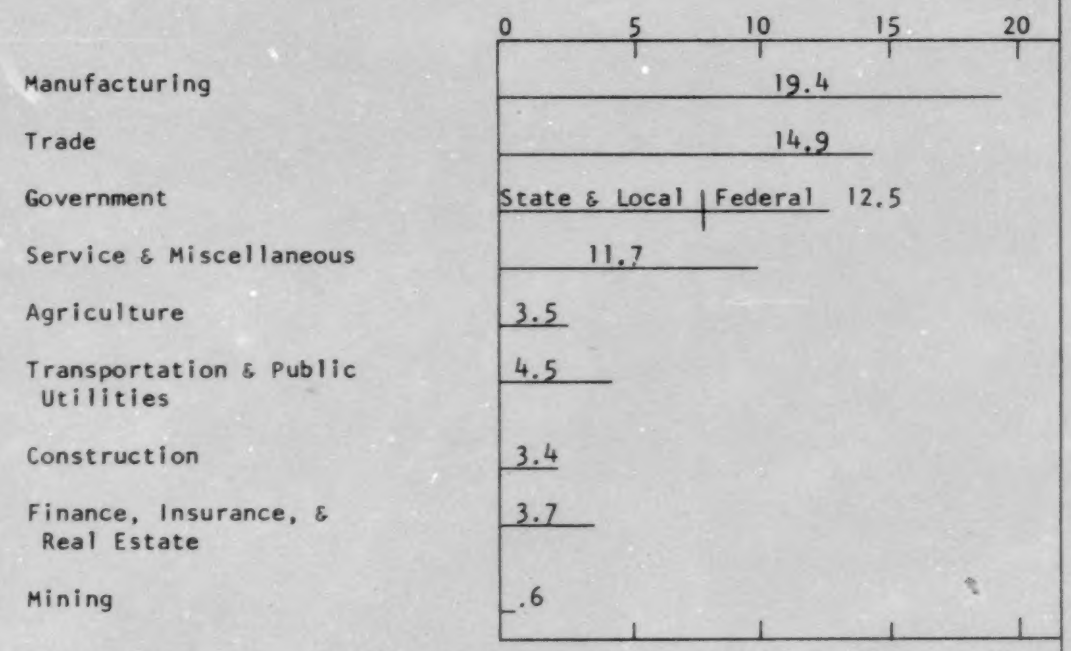
1-4. About how many workers were employed in all kinds of farm work in 1970?

1-5. All types of service workers combined accounted for more employment in 1970 than did Skilled Workers. Please check the correct answer.
Ture _____ False _____.

☆ ☆ ☆

Chart II indicates the total amount of employment in 1970 in each of the nine major industrial groups in our economy. For example, it shows that there were about 3.5 millions workers employed in the agriculture industry. This means that there was just about one-third as many workers employed in agriculture in 1970 as there were in government.

Chart II. EMPLOYMENT IN THE UNITED STATES BY INDUSTRY DIVISION, 1970



*All wage and salary workers except agriculture
SOURCE: MANPOWER REPORT OF THE PRESIDENT 1972, p. 259

Questions. Using the data in Chart II, please check the correct answer.

1. Trade accounted for more employment in 1970 than did agriculture. True _____ False _____.

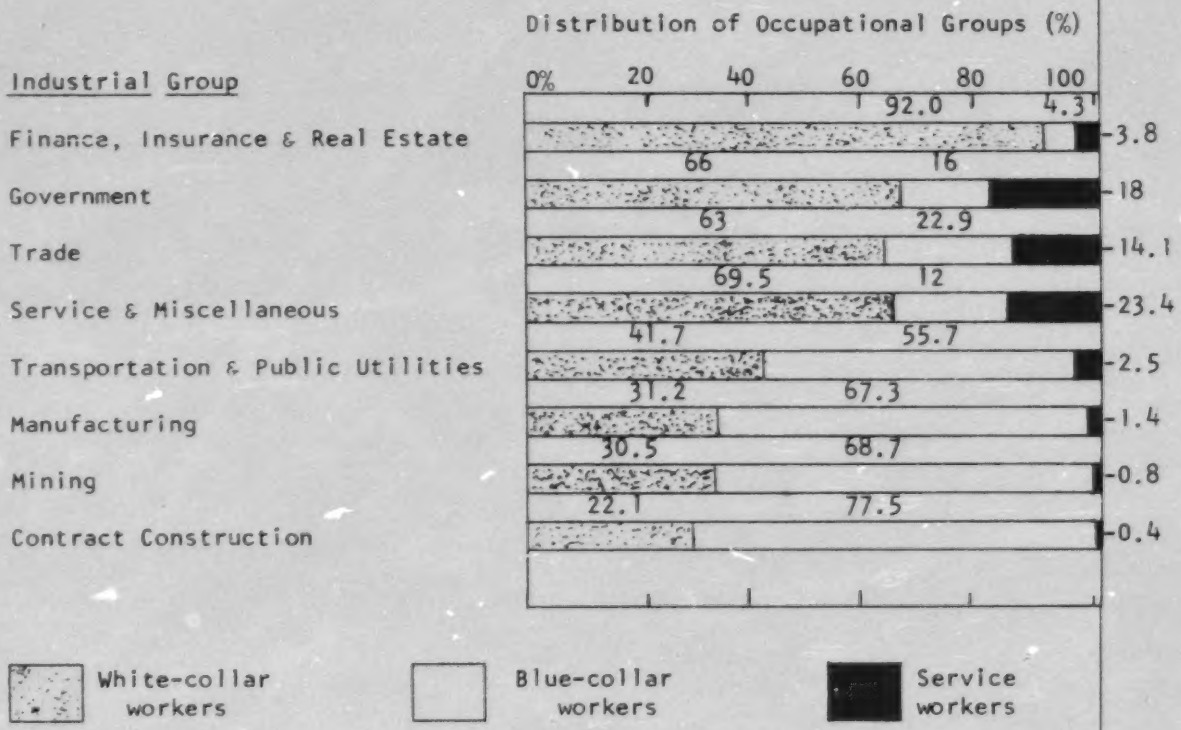
2. The goods-producing industries (remember: agriculture, construction, manufacturing, and mining) employed more workers in 1970 than the service-producing industries. True _____ False _____.

3. More workers in 1970 were employed by the federal government than state and local governments. True _____ False _____.

* * *

Chart III presents the industrial sources of white-collar, blue-collar, and service employment. It shows the percentage of employees that each of the three occupational groups accounts for in nonagricultural industries. For example, nearly 50% of all workers employed in nonagricultural industries were white-collar employees. However, the proportion of white-collar employment varies a great deal among the particular nonagricultural industries. (In construction, white-collar workers account for only about 20% of the total employment in that industry. However, in finance, insurance, and real estate over 90% of the work force consists of white-collar employees.

Chart III. PROPORTION OF WHITE-COLLAR, BLUE-COLLAR, AND SERVICE WORKERS IN NONAGRICULTURAL INDUSTRY GROUPS, 1970



SOURCE: U. S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook, 1972-73 Edition, p. 17 & 840

III-1. In 1970, in what industries were 50% or more of the employees White-collar workers?

III-2. What three industries employed 18% or more Service Workers in their operations?

III-3. Blue-collar workers make up the majority of employees in what four industries?

III-4. What is the relationship between occupational and industrial employment opportunities? (Hint: Do opportunities for Service Workers look better in some industries than others?)

* * *

Let's see if we can summarize what we have learned about jobs and employment in our economy. We have seen that the thousands of different jobs that workers have in our economy can be analyzed by using occupational and industrial classification systems. These two classification systems make use of categories of jobs and categories of industries. For example, all the occupations in the "white-collar" occupational category share certain common characteristics, just as do the industries in the "goods-producing" industrial category. "Professional and technical" occupations have a number of important similarities as do the industries in the "manufacturing" industrial classification.

Using the occupational classification system, we found that in 1970 about 48% of our workers were employed in White-collar occupations while the remainder were employed as follows: Blue-collar, 35%; Service, 13%; and Farm, 4%. A more detailed examination of occupational employment in 1970 shows the following distribution: Semiskilled or operative workers, 18%; Clerical, 18%; Service, 11%; Skilled craftsmen and foremen, 13%; Professional and technical, 14%; Managers, owners, and officials, 11%; Sales, 6%; Farmers and farm managers, laborers, and foremen, 4%; and Unskilled laborers, 5%.

* * *

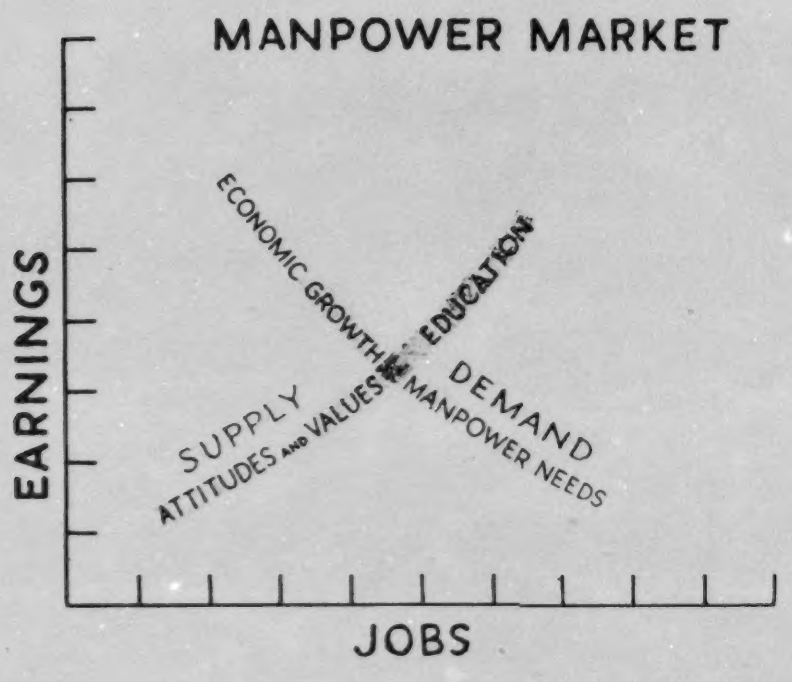
We initially classified industries as either goods-producing or service-producing. Employment data for 1970 show that the service industries provided 67% of the total employment. (The remaining 33% is accounted for by the goods-producing industries.) A more detailed analysis of the industrial sources of employment disclosed that manufacturing provided the most jobs. The other industries ranked from highest to lowest, as sources of employment, were as follows: (1) trade; (2) government; (3) service and miscellaneous; (4) agriculture; (5) contract construction; (6) transportation; (7) public utilities; (8) finance, insurance, real estate; and (9) mining. We also found found that Blue-collar workers dominated the employment picture in the non-agricultural goods-producing industries. The White-collar occupations are prominent in the employment situation in the service-producing industries.

* * * * * * * * * *

Today's Lesson in Brief

The millions of workers in our economy are employed in several thousand occupations on many different types of industries. Occupational and industrial concepts have been developed by the U. S. Department of Labor to identify the workers' jobs. By using these concepts we can classify and record the changing employment situation in the manpower market. Nearly half of our employed labor force works in White-collar occupations. Blue-collar workers account for about one-third of total employment. One-seventh of our work force is employed as Service workers; and Farm workers represent one-twenty-fifth of total employment. Seven out of every ten employed workers in the economy are found in the service-producing industries, which are the primary source of white-collar employment. The goods-producing industries--which are the source of employment for the balance of the workers--provide the majority of job opportunities for blue-collar workers.

SUCCESS IN THE WORLD OF WORK



When men and women enter the manpower market, they want meaningful jobs with high pay and opportunities for advancement. However, in order for the manpower market to provide these jobs, there must be a smooth meshing of both demand and supply forces. The economy must be growing rapidly enough to provide job opportunities for everyone in the labor force. Workers must develop skills and attitudes that meet the demands of a dynamic industrial system. Jobs and workkers must be brought together with a minimum of friction and waste through improved information, mobility, and employment practices. An effective manpower market can provide for the fullest and most efficient use of the nation's human resources.

"... But Woman's Work Is Never Done"

Women do much of the work in our society. Not only are they responsible for day-to-day management of the great majority of American homes and caring for their families, but millions of women are also entering the manpower market and accepting employment outside the home. Women are playing an ever greater role in producing the goods and services for sale in the market and helping provide us with a higher standard of living. (Almost every American woman is employed at some time in her life.) A brief overview of the "revolution" which is taking place in the working lives of women will help not only the girls--but the boys as well--understand how the work-role of women is changing and the effects of these changes on our personal, social, and economic lives.

* * * * * * * * *

What kinds of work do women perform in the United States? There are 48 million families in America; women do most of the family household work. In about 60% of families, women also have responsibilities for taking care of one or more children. In 5 million families, the woman is also the head of the household.

"WORK DONE BY AMERICAN HOUSEWIFE WORTH $5,700"

"Work done by the average American housewife is valued at $5,700 a year, according to a report issued this week by research economists. Estimates were based on hourly wages paid for house-cleaning, cooking, child-care, and related services to women employed as personal household workers."

Question: What is the total economic value of all housework done by the millions of American housewives? Do we include the value of these services in measuring our Gross National Product?

* * *

But this is not the only work that women do in America. Table I shows, for example, that in 1970, over 10 million women held jobs as clerical workers. Nearly 2 million women were employed as sales workers. More than a third of the 9 million professional and technical workers employed in our economy were women.

Table 1. MAJOR OCCUPATIONAL GROUPS OF EMPLOYED WOMEN, 1960 and 1970*

Major Occupational Group	Number (in thousands) 1970	1960	% Distribution of All Women Employed 1970	1960	Women as % of Total Employment** 1970	1960
Professional & technical workers	4,298	2,730	15%	12%	37%	36%
Managers, officials, & owners (except farm)	1,321	1,099	5	5	13	14
Clerical workers	10,233	6,617	35	30	71	70
Sales workers	2,091	1,680	7	8	40	50
Craftsmen & foremen	332	222	1	1	3	2
Operatives	4,303	3,333	15	15	29	25
Laborers (except farm and mine)	136	82	1	1	3	3
Private-household workers	1,518	1,943	5	9	94	95
Service workers (except private-household)	4,909	3,236	17	15	68	52
Farmers & farm managers	80	109	1	1	6	4
Farm laborers & foremen	445	848	2	3	36	38
TOTAL, ALL GROUPS	29,667	21,874	100%	100%	38%	33%

*Women 16 years of age and over.
**Both men and women.
Totals may not equal 100% because of rounding.
SOURCE: MANPOWER REPORT OF THE PRESIDENT 1972, p. 171

Questions:

T-1. In which three occupational groups did women represent over 50% of the total employment in 1970?

T-2. About 1 out of every 3 workers employed in the United States in 1970 was a woman? Please check the correct answer. True ____ False ____.

T-3. This proportion (1 woman out of every 3 workers) was higher in 1970 than in 1960. True ____ False ____.

T-4. What is the significance of 37% which is boxed?

T-5. In what types of jobs are women currently employed? Are they predominately blue-collar workers? Unskilled workers?

T-6. In general, how well paid do you suppose women are relative to men? Please check the correct answer. Better ___ The same ___ Worse ___.

T-7. In 1970, men made up what percentage of the total number of people employed in clerical work?

* * *

Let's turn from the present to the future by examining data published by the U. S. Department of Labor concerning the life and employment patterns of women of tomorrow. Most girls in the United States can expect the following life patterns as they move from school through middle age to the later years of life:

Unless they go to college, the majority of unmarried girls will go to work at age 17 or 18 after leaving school. Within three or four years, a large number of these young women will marry. Some of them will stop working for pay in order to get a new home organized, but a majority will continue to work to make it possible for a husband to get through school or to permit purchase of such things as a car, a home, or labor-saving equipment. Then when the first baby arrives, the vast majority of young mothers give up their jobs and remain out of the manpower market until their youngest child is old enough to go to school. (About one in five women with preschool children will continue to work, usually because of economic need, but the general pattern will be that the age group 25-34 will provide the smallest share of women workers.)

When the youngest child no longer needs constant care, many mothers will choose to return to paid employment. This will usually happen when the women approach their middle 30's, after they have been out of the work force for about eight or ten years. Once back, the tendency will be for them to remain in the labor force, perhaps not continuously, but certainly for a great share of their years to age 65. By 1975 nearly half of all women between 35 and 65 will probably be either working or looking for work. Unless things change radically and unexpectedly in the years ahead, more women age 45 to 54 will be active in the labor force than any other age group.

For the one girl in 20 who remains single, the length of her working life will differ little from that of a man. Since most single women must support themselves, and often parents or other relatives as well, they must continue to hold a job.

To summarize, the "work-life expectancy" as it is often called, for the women of tomorrow will be: for single women, about 40 years, for childless married women, about 30 years; and for married women with children, about 15 to 25 years, depending on the number of children.

* * *

Discussion Questions

Girls: What do you think are some of the educational, social, and economic implications for you of this look at your future? Do you like what you read about your future?

Boys: Does this portrait of the "new American woman" appeal to you? Why or why not? What do you think is good or bad about the changing employment patterns of women?

* * *

Item #1 "WOMEN WORK AS CONSTRUCTION LABORERS"

"Women are employed as highway laborers to place and tie together steel reinforcing rods in concrete paving. They are paid the same hourly wage as men, under rules established by the government."

Item #2 "WOMEN HOLD TOP PROFESSIONAL JOBS"

"Statistics released by the government indicate that 74% of all the nation's medical doctors and 60% of its economists are women. Nearly one-third of the engineers are women."

Questions: Do you think that item #1 refers to women in the U. S.? What country is referred to in item #2? What do these reports suggest to you regarding employment opportunities for women?

* * *

We have seen that American women do provide "womanpower" that helps get much of the work done in our economy. This conclusion is supported by data from the U. S. Department of Labor which shows that out of every 100 women (14 years of age or over) in the United States in 1962 --

52 were working exclusively in keeping house,
35 were employed outside the home,
9 were going to school,
2 were unemployed,
1 was unable to work, and
1 was in an "other" category.

* * * * * * * * * *

Today's Lesson in Brief

By examining the data in this lesson, we have found that there is a great deal of truth in the saying that "woman's work is never done." Women work in the homes, factories, offices, laboratories, and the classrooms of out society. Women are providing an increasing share of the human resources that are the key to our economic productiveness. In fact, nine out of every ten girls today will be gainfully employed at some time in their lives.

Housewife or Career Girl?

"It was the standard proposal of marriage ...
Would I keep my job for a while?"

A kind of "revolution" has occurred in the pattern of women's lives in America. In order to understand and prepare herself for this revolution, a girl needs to consider that during her life she will probably be both a housewife and employed worker--often at the same time. Boys and men should recognize how this "new American woman" will, in turn, affect their own personal, social, and economic lives. If the girls of today are going to realize their fullest potential both as homemakers and employed workers, they will have to look closely at themselves and the changing world about them. They will have to think seriously about what they want from life. Information about the changing patterns of women's lives, both in and out of the manpower market, can help girls make the decisions today that will increase their chances for a meaningful life tomorrow.

* * * * * * * * * *

The revolution which is occurring in the patterns of women's lives has several dimensions, as the following information from the Women's Bureau of the U. S. Department of Labor shows:

-- The life expectancy of a girl baby now is almost 74 years; in 1900 it was 48 years.

-- About half of today's women marry by age 21 and have their last baby at about age 30; by the time her youngest child is in school, the mother may have 30 or 35 more years of active life (including "work years") before her.

-- It is estimated that 9 out of 10 girls today will be gainfully employed at some time during their lives.

-- Today we have approximately 29 million women in the labor force; by 1980, it is estimated, there will be over 36 million. More than 1 out of every 3 workers today is a woman; almost 3 out of 5 working women are married and living with their husbands.

-- In 1920 the average woman worker was single and 28 years old. Today, the average woman worker is married and 41 years old.

-- Labor-saving household equipment and prepared foods shorten the time required for housekeeping.

-- The greater economic demands on the family--such as higher cost of educating children, higher cost of health care, and cost of greater variety of goods and services considered necessary to meet the American standard of living--increasingly seems to require a "two-paycheck" household.

-- More and more in our society, the opportunity to apply for a job or get a promotion depends on higher levels of education--and women are getting more schooling.

-- Increasingly women are seeking the right to choose how they will make their contribution to their family and their community.

Questions. Based on the facts and comments listed above, please answer the following questions?

1. How much freedom of choice does a young woman have today for deciding what type of life she will live? How much freedom should she have?

2. "Women must be trained to understand ideas and principles as well as developing 'how-to-do-it' skills because many women will be coming back into the labor force in their early 40's." Do you agree with this statement? Why or why not?

3. Why should women start thinking of preparing themselves for occupations such as medical doctor, scientist, technician, engineer, and manager--jobs that many women have not prepared themselves for in the past?

4. What does this "revolution" in the lives of women mean for men? Give some specific examples.

5. What are some of the personal, social, and economic changes that have taken place in family life as a result of a wife-mother being both a homemaker and an income earner?

* * *

Another way we can examine the change that has taken place in the old "housewife-career girl" division of women--a woman used to be either one or the other, not both--is to look at some typical employment situations that face young married women today throughout our country. As you read the following case studies you might ask yourself what these three young women have in common with one another. Are they Housewives or Career Girls?

CASE #1

(Ann describes her employment situation by first telling something of her background.) "You know Jack and I were married soon after we graduated from high school. Jack got a job at the local automobile assembly plant and earned a good salary and didn't want me to work. We started our family soon after we were married since we both wanted a big family. We had four children; the baby is only two years old. Then last year Jack was hurt in an accident at the plant and couldn't work any more. Although Jack's paycheck was no longer coming every two weeks, we were not left without income. There was the Workmen's Compensation payment (a system of insurance required by state law and financed by employers, which provides payment to workers or their families for occupational illness, injuries, or death resulting in loss of income) and some money from our own insurance policy. However, we had to face it--our income wasn't enough to support the family."

"Luckily there's a good day-care center near our house. I found out they would take care of the baby during the day, when the older children were in school, and then made the rounds of the stores downtown until I got a job--selling children's wear. I know plenty about that! I don't make much for a family our size. We don't have a new car or a new TV set, or a new anything as far as that goes, but at least we're all together--that's the most important thing."

* * *

CASE #2

Mary tells about a different, but nevertheless a typical employment situation which she faces. "Hank and I were married a month after I graduated from high school. He still had two years of college to finish so I got a job as typist so he wouldn't have to drop out of school. We were married three years before our first baby came. By that time I'd had two promotions and was the private secretary of the vice-president of the company I worked for. When I had to quit work to have our baby, my boss told me to let him know if I ever wanted to come back to work again.

"By the time Judy was four, and we were trying to raise enough money to make a downpayment on a house, I called my old boss and asked him if he could find me a part-time job. So I went back to work, filling in part-time at the main office for the girls who were sick or on vacation. Not only did the extra money I made help, but I kept my skills from getting too rusty. Last fall Judy started first grade, and I found that there really wasn't enough around the house to use up my time and energy, so I took a full-time job with my old employer. I go to work after Judy is in school and she stays at a neighbor's house until I get home in the evening. By working full-time, I feel like I am more than just a housewife--that I am making a contribution to the company that I work for. And we find plenty of uses for that extra paycheck I bring home."

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CASE #3

Ruth explains that her employment situation is somewhat different from the other two girls. "The summer between my junior and senior year in high school I worked as a Red Cross aide in a hospital and decided that I wanted to be a nurse. However, I was afraid that the training would cost too much. After school started that fall, I decided to go to Mrs. Smith, our school counselor, and see if she could help me figure out a way to go to nurses' training school. Well, Mrs. Smith was full of ideas. She told me about scholarships and loans for student nurses and encouraged me to fill out some application blanks. And sure enough, by the time I had graduated I had been accepted by one of the best nursing schools in the state.

"After I finished my training, I went to work in the maternity (baby) ward of a large hospital. I worked there for four years before I quit because Bill and I (we were married the previous year) were going to become parents. Our baby is now two and I have returned to nursing on a part-time basis. I'm on call at the hospital for emergencies when they need a special night nurse in the maternity ward. Bill takes care of the baby at night when I have to go to work."

* * *

With the facts from these case studies in mind, how would you answer the following questions:

1. When do women make occupational decisions?
2. Why do women work? Give examples from the three case studies.
3. What types of personal, social, or economic stresses and strains may arise when married women seek employment? Example: It may be necessary for husband to baby-sit with his children while his wife works.
4. What is the "cost" to the family of a married woman who has a job? Hint: Remember the idea of "opportunity costs" that you studied earlier in the course.

* * * * * * * * * *

Today's Lesson in Brief

A revolution has been taking place in the lives of women--a revolution which affects not only women, but men as well. The old way of thinking of women as either Housewives of Career Girls is now largely obsolete. More and more women are combining both these roles at the same time at different periods of their lives. The personal, social, and economic lives of everyone in our society will be influenced by this new dual role of women.

Where the Jobs Are

Individual workers must adjust not only to industrial and occupational changes in the employment situation, but also to changes in the places where jobs are available. Information on the mobility (movement) of Americans will help you understand why so many American workers are on the move. Information on the geography of changes in employment opportunities can assist you in your occupational planning by suggesting where the jobs of tomorrow are most likely to be located.

* * * * * * * * *

Each year, many Americans change their place of residence. Records kept by the federal government on the mobility of the population show that every year about one out of every five people in the United States moves. (However, only about 6% of the 40 million Americans who change their residence during the year move to a different county or state.)

You might ask why all these people are moving. There are many "personal" reasons such as health, but the most important reason why people move is economic opportunity--including the search for a job, or a better job.

Who are the people that are "on the move?" Do they share any special characteristics with each other? One way to answer these questions is to check the records of people who have actually changed their residence in recent years and see if the ones who moved have certain characteristics and the ones who didn't move have other characteristics. Table I shows three important factors--education, occupation, and race--that may account for differences in mobility. For example the data reveal that 30% of all college-trained white workers changed residence at least once in the preceding five years, whereas only 10% of college-educated negroes made a move.

Table I. EDUCATION, OCCUPATION, AND MOBILITY FOR WHITE AND NEGRO WORKERS

Personal Characteristics	Percent in each group who moved in 5 most recent years	
	White	Negro
EDUCATIONAL LEVEL:		
8 grades or less	8%	4%
9-12 years	15	11
College	30	10
OCCUPATIONAL GROUP:		
Professional, managerial	31	5
Laborers, service workers, operatives	16	6
Other	13	8

SOURCE: Social Security Bulletin, "Negro-White Difference in Geographic Mobility," May, 1963, p. 13.

Questions: Which of the following conclusions can be supported by the data in Table I? (Put a check mark on the correct blank.)

I-1. Negro workers are more likely to move than white workers.
True _____ False _____.

I-2. The more education you have the less likely you are to move.
True _____ False _____.

I-3. Professional and managerial workers move more frequently than unskilled or semi-skilled workers. True _____ False _____.

For Discussion: Do you think that higher mobility rates indicate more freedom of job choice for a worker? What else might mobility rates reveal?

* * *

"Each year, 40 million Americans change their place of residence."

The geography of employment opportunities has shifted a great deal in the past and will continue to change in the future. Table II on the next page shows geographic employment trends since 1947. See how the statistics in this table can help you answer the questions that follow.

Table 11. PERCENTAGE INCREASE IN NUMBER OF JOBS, BY GEOGRAPHICAL REGION, 1947-1964*

Increase in Jobs for Total U.S.: [+33%]

New England	**+16%**
Maine	8
New Hampshire	24
Vermont	13
Massachusetts	13
Rhode Island	1
Connecticut	28
Middle Atlantic	**+14%**
New York	15
New Jersey	33
Pennsylvania	3
South Atlantic	**+54%**
Delaware	53
Maryland	50
District of Columbia	25
Virginia	20
West Virginia	[-12]
North Carolina	53
South Carolina	49
Georgia	56
Florida	139
East North Central	**+21%**
Ohio	[19]
Indiana	28
Illinois	16
Michigan	23
Wisconsin	29
West North Central	**+30%**
Minnesota	34
Iowa	24
Missouri	24
North Dakota	46
South Dakota	39
Nebraska	33
Kansas	36
East South Central	**+42%**
Kentucky	35
Tennessee	45
Alabama	37
Mississippi	58
West South Central	**+54%**
Arkansas	50
Louisiana	45
Oklahoma	43
Texas	60
Mountain	**[+80%]**
Montana	26
Idaho	37
Wyoming	35
Colorado	71
New Mexico	109
Arizona	166
Utah	65
Nevada	179
Pacific	**+68%**
Washington	27
Oregon	35
California	81

*Nonagricultural wage and salary employment, 48 continental states and District of Columbia

SOURCE: S. Wolfbein, "The World of Work," The Encyclopedia of Careers and Vocational Guidance, 1967, p. 42.

Questions:

11-1. In what regions and what particular states are employment opportunities growing the fastest? The slowest?

11-2. What additional information do you want to know before rushing off to Nevada to get a job?

11-3. What is the importance of the boxed numbers?

11-4. How do you explain the wide differences in the growth of employment among the various states?

After looking at data on mobility and the location of new job opportunities, what conclusions can you draw? Here are four: please add some others:

-- The more schooling you have the more likely you are to move.

-- There have been some large shifts in the location of jobs.

-- Professional and managerial workers, who usually have the most formal education, are highly mobile.

-- Job opportunities have increased faster in the West and South since the end of World War II than in other parts of the country.

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Discussion Questions

1. "As every student of American history knows, we are an extraordinarily mobil population." Comment, giving examples from the 1700's and 1800's.

2. Are high mobility rates among workers a good thing for the economy? For our society?

* * * * * * * * * *

Today's Lesson in Brief

We are a nation on the move, with the better educated and the professional and managerial workers changing their residence more often than the other types of job holders. We also found that where the jobs are located is constantly changing. The geography of employment opportunities has shifted greatly in the past 20 years and will continue to change.

TECHNOLOGY AND CHANGE

World-view for a Changing World

"The future belongs to those who prepare for it."

-- Anonymous

In order to prepare yourself for the future--for effective participation in economic life and for successful living in a general sense--at a minimum you will need good health, education, and a realistic "world-view" that is oriented to the future. This world-view must accept the fact that many things are changing in the world, including our technology, resources, and institutions. The individual who can adjust effectively in a changing world is able to avoid many problems, fears, and burdens. He can also benefit more fully from the opportunities that progress and change may offer.

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Today's lesson is "philosophical." (The word philosophy means the "love of wisdom" and refers to the study of knowledge.) Most people have a "philosophy of life" that includes their beliefs about the meaning of life and what things are most important in their own lives. Don't be shocked or surprised to find that economics is closely related to philosophy. Most professional economists have earned a university degree called "Doctor of Philosophy" (Ph.D.). Adam Smith, the "father of economics" was a moral philosopher in Scotland before he became interested in economic science. Twenty years before publishing his famous book, The Wealth of Nations, in 1776, Professor Smith wrote a book on virtue and ethics entitled The Theory of Moral Sentiments.

Let's explore some ideas concerning an individual's world-view (the way he looks at the world and interprets what he sees), and the subject of change. We'll begin with a story about a cow.

"The Shafter Cow"

"At exactly 5:13 a.m. on the 18th of April, 1906, a cow was standing at 123-degrees, 20-minutes West longitude, 37-degrees, 58-minutes North latitude--somewhere between the main barn and the milking shed on the old Shafter Ranch in California, minding her own business. Suddenly, the earth shook, the skies trembled, and when it was all over, there was nothing showing of the cow above ground but a bit of her tail sticking up."

"For the student of change, the Shafter cow is a sort of symbol of our times. She stood quietly, thinking such gentle thoughts as cows are likely to have, while huge forces beyond her understanding built up all around her--and, within a minute, destroyed a city and swallowed her up." (From "Kaiser Aluminum News," 1966.)

Questions

1. What famous disaster occurred in northern California in 1906 that "destroyed a city and swallowed up" our friendly cow?

2. Explain the sense in which the Shafter cow is "a sort of symbol of our times." List two or three of the "huge forces" that are building up around us in the United States at the present time.

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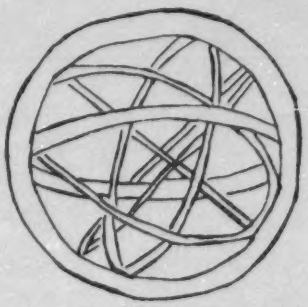
How do people view economic change? What is your own personal world-view? Before you answer, read the following excerpt (with a few changes) from a book entitled Economics and Man:

> "In economics, the general view that you have of the whole economic system is the most important element of your economic thought. If you think the tendency to bargain and trade is 'original human nature'; if you think that the rational search for pleasure and the avoidance of work and pain are the mainsprings of human action; if you think that the market determines the natural and just way of distributing income; then you have one view of the economic world, and this view may affect your beliefs about how to run the government (what manpower policies to follow, and how to conduct a war against poverty).



"If, however, you have different ideas--that capitalism is a growing, changing institution that has developed out of former ways of organizing production; that man's actions are only partly rational; that the things we consume (and the work we do) are dictated by our institutions rather than by our rational search for pleasure--then you have a quite different world-view, and this may affect your attitudes toward economic change and how to solve particular economic problems."

Questions:

1. Do you believe that it is "human nature" to buy and sell, seek pleasure, and avoid work? Explain your answers.

2. Do you agree that "capitalism is a growing, changing institution?" Give reasons for your answer.

3. How might your solution to the problem of poverty differ depending on what your economic world-view happens to be. (Hint: What are some views of "human nature" and the causes of poverty?)

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Just as nobody can know for sure exactly what the future will bring, neither can anyone tell you exactly what the "correct" world-view is for you. This is a matter of personal philosophy that develops and grows as you learn more about the world and your place in it. Are there any ideas or clues that might be helpful in searching for a useful world-view? Are there certain facts that we have learned about man and the world he lives in that are relevant?

We are pretty sure the answer is yes. For example, we can look into the future and predict with a great deal of confidence that life in the year 2022 will be a lot different than life in 1972. The work that men and women do, the goods and services they consume, the methods of production will all be vastly different. Moreover, since the rate of change in technology and economic life seems to increase each year, we can expect life 50 years from now to be much different--with changes even greater than occurred between 1922 and 1972.

How will it be possible to "renew" yourself to keep pace with change? How can you adapt yourself and adjust to the new demands that will be placed on you as a worker, consumer, citizen--and as a person? How can you face the future with optimism and hope, rather than with pessimism and fear?

Previous lessons in this course have suggested partial answers to these questions. Certainly it will be easier to face the future if you have acquired skills and understanding, especially skills that are basic and durable, versatile, transferable to new work, and open-ended so that you can continue learning throughout your lifetime. It will be easier to adjust to the future if you develop and maintain good health, both physical and mental. And, finally, if you expect change, and if you are oriented to the future rather than the past, you will have attitudes and a world-view that makes adaptation to change much easier for you.

If you approach the future creatively and with enthusiasm, you will be better able to make the future serve your needs and desires instead of feeling that you are the helpless victim of "huge forces outside your understanding" and beyond your control.

* * *

Discussion Questions

1. "Fear of the future gives opportunity the face of disaster." What do you think this statement means?

2. How can you prepare yourself now to face the new demands that will be placed on you in the 21st century?

3. What are some of the problems that our country as a whole will face because of changes that are occurring in our economic life?

4. What can you do as an individual, and what can we all do together as a society to avoid being "swallowed up" by vast changes in our way of life?

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Today's Lesson in Brief

Technology, economic resources, and the institutions of our society have changed a great deal in the past 50 years. We can expect the world to continue changing in the future. In order to meet the challenges of change, and take advantages of opportunities provided by technological progress and economic growth, you will need to develop skills and understanding, good mental and physical health, and a world-view oriented to the future rather than to the past.

THE JOB

MANPOWER MARKET

The Work That People Do

"I am the people, the mob, the crowd, the mass.
Do you know that all the great work of the
world is done through me?"

--Carl Sandburg (I Am The People, The Mob)

The division of labor is carried so far in the American economy that workers today are employed on almost every type of job you could possibly think of. The United States Department of Labor has classified 36,000 jobs and nearly 500 separate occupations. Descriptions are given for work that men and women do in our economy.

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We have seen how specialization and the division of labor help to increase the productive powers of labor. But how is the work divided in the U. S. economy? What specific kinds of jobs do the men and women in our work force do?

There is a great variety of jobs in the American economy. There are in fact, according to the Federal government's job classification system, 479 individual occupations which have 23,000 definitions and 26,000 titles. All of these jobs contribute to our economic, social, and personal well-being. These jobs differ in many ways--hours of work, pay, working conditions, employment requirements, location, and the size of the enterprise that employs the workers.

We'll look at the panorama of jobs in our economy so that you will have some idea of the various types of opportunities there are for employment in the American economy. The more you know about jobs the better will be your understanding of the manpower market, where employers hire workers.

The job want ads that follow on the next few pages are the type that newspapers in America carry every day. As you read these job announcements, ask yourself the following questions:

1. Which of these jobs is of interest to me? Why does it interest me?

2. If I take the course of study I'm planning on for the rest of my schooling, which of these jobs could I qualify for?

BOY AND GIRL GRAPHIC DESIGNERS: ARE YOU TIRED OF THE CITY?

Let us offer you the opportunity of designing High Style collateral material and the facilities to Art direct from beginning to end under one modern roof.
Send us six of your best pieces along with a brief resume. If suitable, we'll fly you to our place in the country. You'll find national accounts for your ego and a pastoral atmosphere for your peace of mind. (Check us in D & B if you just can't believe it.)

ALDERMAN STUDIOS, INC.
High Point, N.C. 27261

HOUSEWIVES

Part-time work in sales for evening and Saturday hours. Some day hours. Immediate discount on purchases.

Apply in Person

ASSISTANT TREASURER
Educational Service Organization

Man with Accounting background needed to assist department head and oversee accounting department. Must be good correspondent and able to communicate with contacts in financial community. Accounting degree required, experience in College Fund Accounting desirable but not necessary. Office Midtown Manhattan. Generous fringe benefits. Salary open. Send detailed resume.

Box X 7442 TIMES

DISPATCH CLERK

Opening on evening shift for young man, 19 to 35. Interested in future with transportation. Apply in person

ASSOCIATED TRUCK LINES

BEHAVIORAL SCIENTISTS

For Management Development

The Challenge: Developing managerial resources in one of several mult divisional complexes.
The Program: Independent responsibility in an all-out, close working group operation that involves

- Managerial performance evaluation.
- Executive selection and assessment.
- Early identification of potential.
- Organizational analysis and planning.

The Goal: Transformation of management potential into a dynamic and productive management force.
The Requirements: An advanced degre in psychology, five or more years combined clinical, industrial or consulting experience. Ability to use sophisticated personnel assessment techniques and behavioral principles for genuine contributions to the very highest level of management.
The Atmosphere: Rewarding. With full recognition for this important function in a progressively expanding billion dollar corporation.
Positions exist at several attractiv locations.
Please send resume, salary progress and current requirements.

SOLENOID VALVE SALES

Due to expanding present line of sol noid valves, large mid-west manufacturer has openings for additional sa engineers. Three or four years expe ience is required with a preferred background in pneumatics and hydraul There will be some nation-wide trave from the base operation. Company ca excellent salary and liberal employe benefit program will be available to the right men. Submit resume and salary requirement.

MACHINE REPAIR
MACHINISTS

Full time, 2nd shift, must know Lathe, Shaper and Miller, have own tools. Shift premium, good fringes, no age limit.

TRADEMARK LAWYER

Responsible opportunity in New York law firm for lawyer with 1-4 years trademark background.

YOUNG MEN full or part-time trainees. No experience necessary. Are you over 19 years old and over 5'6" tall, well-groomed and neat in appearance? Here's an opportunity to meet and be with a wonderful group of people, attend dances and parties, become an outstanding dancer and teacher. No experience necessary. Top salaries. Frequent increases. Apply in person, ARTHUR MURRAY STUDIOS.

DINNER HOSTESS

Short evening hours. We will train you. Prefer Eastside resident. Apply in person to Mr. Tonetti, between 11 a.m. and 2 p.m.

FURNITURE DECORATOR
and SALES PERSON

A progressive furniture store needs the services of an outstanding sales person. Store has over 40,000 sq. ft. all on one floor. 10 yr. retirement pension plan, plus other added incentives. Store sells medium priced furniture with leading line of Ethan Allen. Replies will be held in strict confidence.

DISH MACHINE OPERATOR

One day and one night. Better than average starting pay.

PHARMACOLOGIST

A major effort is now being made by Union Carbide in the field of pharmaceuticals. Opportunities are now available at the BS, MS and PhD levels with plans to continue staffing throughout 1967. Areas of interest include:

BIOCHEMICAL PHARMACOLOGY
CARDIOVASCULAR PHARMACOLOGY
NEUROPHARMACOLOGY

Enjoy the benefits of an industrial research affiliation in an academic environment. Your inquiry will receive prompt and confidential consideration.

ACTUARIAL ASSISTANT

Nationally known company offers exellent opportunity to college graduate with major or minor in mathematics. Intent to study actuarial science and prepare for Society of Actuaries examinations necessary. Applicant will assist actuary in rate computations, statistical studies, and mathematical analysis. This is a tremendous opportunity to immediately assume professional responsibility and increase your stature based upon your own capabilities. Send complete resume including salary requiremnts.

Box CE-760, The Wall
Street Journal

MEDICAL TECHNOLOGIST A.S.C.P.
Male or Female

Full time position available, salary commensurate with experience. Excellent fringe benefits. Apply to personnel office.

SUBURBAN COMMUNITY HOSPITAL

LABORERS

Wanted to assist brick mason.
50 hrs. per week,
total pay approximately $120

CALL BET. 9-5 P.M.--252-2123

JANITORIAL WORK
Part Time

Applicants desired for steady work late eves. 12 p.m. to 6 a.m. Sun. through Thurs. In good health, between 21 and 50. No police record, must drive and have own car.

CITY JANITORIAL SERV. CO., INC.

YOUR OWN COSMETICS BUSINESS

We have MAGIC ALOE. Less than $20.00 starts business. Unlimited earnings. No door to door selling. For free samples and color brochures, send $1.00 for postage and handling.

CARISSA COSMETICS

GO-GO Dancers for afternoon cocktail hour.

The Forty Thieves.

* * *

Question: Based on the information in the job ads, what tentative conclusions can you make about jobs in our economy, or about the way they are advertised? EXAMPLE: Many of these job advertisements make a direct appeal to a certain type of personality. Can you list some others?

1.

2.

3.

4.

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Today's Lesson in Brief

There are many different types of jobs in the American economy. All the workers in these jobs are making a contribution to producing our economy's goods and services. These jobs differ a great deal in terms of employment qualifications, pay, hours, working conditions, and so forth. Some of these jobs will offer you an employment opportunity when you are ready to enter the manpower market.

The Changing Manpower Market

The labor force is the supply of workers who already have jobs or are able and willing to accept employment. It is from this group that employers choose their workers. The labor force keeps changing, in number and composition. Knowledge of the changing labor force can prove valuable to you in planning your career. It will help you identify the amount and type of competition you will face in tomorrow's manpower market.

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In this lesson, we consider the questions of who is included in the labor force and what is happening to its size and composition. And we'll discuss the significance of changes that are taking place in our labor force.

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The OVERALL SIZE of our labor force has been growing steadily. In 1970 we had about 13 million workers in the total labor force. By 1980 it is projected by the U. S. Department of Labor's Bureau of Labor Statistics that the labor force will be 101 million. That amounts to an eight-fold increase (up 770%) in the 110 year period from 1870-1980.

What changes have occurred most recently? Looking back to 1940, we find that we had a labor force of 56 million. By 1960, it had grown to 73 million--an increase of 17 million potential jobholders. However, this past growth in the labor force is overshadowed by what will happen during the period 1960-1980. By 1980, it is projected that our labor force will be 101 million or 28 million more than it was in 1960.

In other words, our labor force grew almost twice as fast during the 1960's and 1970's as it did during the 1940's and 1950's. During the decade 1960-1970, our labor force grew from 73 to 86 million--a 22% increase. We are presently in the period of the most rapid labor force expansion. Between 1965 and 1970 our labor force increased by 7.5 million which is almost 50% greater than the increase that occurred during the first half of the 1960's. In the 1970's, our labor force growth will slow down a little--increasing only 18% in comparison with the 22% growth in the 1960's.

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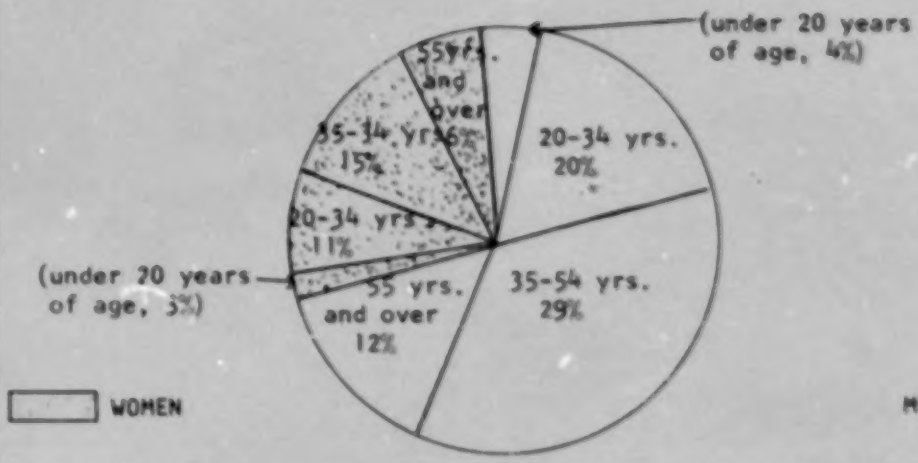
Now let's look at the COMPOSITION of our labor force. Chart 1 shows the structure of the civilian labor force in March 1965. (Note: Civilian Labor Force = Total Labor Force minus Armed Forces.)

Chart 1. CIVILIAN LABOR FORCE BY AGE AND SEX, MARCH 1965



SOURCE: U. S. Department of Labor, Bureau of Labor Statistics, Employment and Earnings, April 1965.

The chart shows, for example, that in a recent year 35% of all the workers in the civilian labor force were women, while 65% were men. Of all the women in the labor force, the largest group was in the 35-54 age bracket.

Questions. Using the data in Chart 1, please check the correct answer.

1-a. More than three-quarters of all workers in the labor force are men.
True _____ False _____.

1-b. The majority of workers, men and women combined, are under 35 years of age. True _____ False _____.

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The Sex and Age composition of our labor force is changing. Women increasingly are playing a more important role in our labor force. At present, more than one-third of all workers in the labor force are women. They are entering the labor force in the 1960's at double the rate of men (By the 1970's, the difference in growth rates between men and women will narrow.) An increasing number of middle-aged women are entering the labor force. However, the labor force over-all is becoming increasingly younger. Between 1960 and 1970 there was a 66% increase in the number of young workers (under 25 years of age) in our labor force. This is more than three times the increase of young workers that is projected to occur between 1970 and 1980. During the 1970's, growth rates of the different age groups (under 25 years, 25-54 years, 55 and over) in the labor force will be more nearly equal than they were in the 1960's.

Another way to examine age and sex trends in the manpower market is to note labor force participation rates. A labor force participation rate is the percentage of workers who are in the labor force out of the total number of people in a certain group of the population. For example, of all males 25-54 years of age about 98% are presently in the labor force. (This is the same rate that is projected for 1980.) For women (all ages combined), the participation rate will rise from 36% in 1960 to over 40% by 1980. Nearly half of all women 25-54 years of age will be in the labor force by 1980. Of the 101 million workers expected to be in the total labor force in 1980, about 36 million will be women.

Questions:

1. Why is it important for you to be aware of the growing participation of young workers and women in the labor force?

2. What problems might be created for the society and the economy because of the increasing number of youth and women entering the labor force?

3. Why do you suppose so many women are entering the labor force?

* * *

Let's summarize what we have learned about our changing labor force and consider the significance of these changes. We found that we have a rapidly growing labor force. From 73 million in 1960, our labor force is expected to expand to 101 million, by 1980. The latter half of the 1960's is the time of most rapid growth. Women and also young men entered the labor force in increasing numbers during the 1960's. During the 1970's the relative growth in numbers of young workers (under 25 years) will only be about one-third of what it was in the 1960's. The growth rate of women joining the labor force will also slow down during the 1970's. However, the participation rate of women is creeping upward and is projected to be greater than 40% in 1980.

* * *

The significance of this growth in our labor force is that our economy will have to create an average of about 1½ million additional jobs every year between now and 1980 in order to employ all the new labor force entrants. These additional jobs do not include the better than 2 million a year that the economy will need to create to offset the productivity (out-put per man hour) gains of American industry. In other words, our economy will require a real growth rate (GNP) of 4% to 5% every year between now and 1980 if we are to find jobs for all the members of our labor force.

Projected growth in our labor force, when viewing its age and sex composition, suggest that women will be increasingly competing with men for jobs. Middle-aged women who are reentering the labor force after raising their families will be especially tough competition for younger girls and for men seeking employment opportunities. The growing youthfulness of the labor force means that competition among young people for jobs will be keen. Our economy must generate an average of about 750,000 entry-type jobs every year during the 1960's to take care of all the young people who are entering the labor force. (During the 1970's, the number of entry jobs needed will drop to about 200,000.)

Employers during the latter part of the 1960's and the 1970's, will have a large number of young workers to choose from and will undoubtedly prefer to employ those who have the best education and training. By the time you enter the labor force in the 1970's not only will you face stiff employment competition from your fellow young workers, but those workers who will be a few years older will also be present in large numbers as competitors for the better jobs that are available.

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Today's Lesson in Brief

Our labor force is growing rapidly, in part because of the increasing number of young workers and women who are entering the labor force. Between now and 1980, our economy will have to generate a real growth rate higher than we have had in the immediate past if we are to find jobs for present and new members of the labor force. Competition for jobs will probably be keen during the 1970's, and employers will tend to hire those who have the best education and training.

How Do I Find A Job?

There are many different ways of finding a job. Often you can get information and help from relatives or friends. You might go directly to an employer and apply for a job. You can read newspaper want ads, check with private employment agencies, labor unions, the public employment service, or simply depend on your luck. The Public Employment Service--a government agency operated by the state, with help from the federal government--offers many valuable services to young workers in addition to actual job placement. Knowledge of the various sources of information and assistance in finding employment can be very useful to you when you enter the manpower market.

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Let's begin our investigation of how you can find a job by seeing how workers in our economy actually do get their jobs. The job-seeking activity of the typical worker is largely a product of his environment. He often obtains information about employment opportunities from relatives and friends. Opportunity is of prime importance in finding a job: a worker hears that they're hiring at a certain firm, or he knows of a company that will accept employment applications. Labor market analysts estimate that 75% of our workers get their first job through relatives, friends, or chance encounters. Other common methods through which workers find jobs are newspaper want ads, direct application to an employer, labor unions, and public and private employment agencies. Public and private employment agencies fill about one of every five job vacancies, with most of these being filled by the various state branches of the United States Employment Service.

* * *

Let's take a brief look at the private employment agencies. There are about 4,000 business firms engaged full-time--and 2,500 part-time--in the private placement of workers in employment. They are profit-seeking businesses that "produce" and sell job-placement services. These firms tend to be concentrated in the larger cities. The private agencies concentrate their placement efforts in clerical, sales, professional, and managerial occupations; but some of them do business in occupations such as baby sitting, domestic service, and jobs involving unskilled labor. The private agencies usually charge a fee for their services, which is often based on a percentage of the salary earned by the worker they place. In some cases the fee for placement is paid by the employer. Some of these private employment agencies offer the worker job counseling and testing as well as actual job placement.

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In addition to these privately owned and operated employment agencies, there are also public employment agencies. The federal-state Public Employment Service--the United States Employment Service and the various state branches such as the Oregon State Employment Service--serves about 4,000 communities in the United States through about 2,000 full-time and 2,000 part-time offices. These local offices are administered by state agencies and financed by federal funds raised through a tax paid by employers. The public agencies place a large percentage of farm, service, semiskilled, and unskilled workers. However, in a recent year they also placed 267,000 professional and managerial; 954,000 clerical and sales; and 316,000 skilled workers.

* * *

Questions

1. Public and private employment agencies fill about one-half of all the job vacancies in the United States. Please check the correct answer. True _____ False _____.

2. About what percentage of workers get their first jobs through relatives, friends, or chance encounters?

3. Private employement agencies tend to specialize in the placement of what types of workers?

* * *

Now let's look at the Oregon State Employment Service (OSES), which is an example of the state governmental employment agency whose services are available to you in your local area. OSES helps Oregon citizens choose, prepare for, and obtain suitable employment. It's local offices provide free employment counseling and testing; occupational information that includes local, state, and national manpower market trends; referrals for training opportunities in such programs as apprenticeship, Manpower Development and Training Act institutional and on-the-job training, Job Corps, and Neighborhood Youth Corps; and job placement both locally and outside of the local area. In some of the larger cities of Oregon (and elsewhere) State employment agencies have established Youth Opportunity Centers (YOC) which are designed especially to help young people get skilled training, gain work experience, and obtain jobs when they become employable.

You may wonder about the 50 State employment services and how successful they are in helping young people. Do you know--What types of questions the State employment services interviewers and counselors ask young workers? What the interviewers and counselors actually do for young workers? Whether the efforts of the State employment services always result in placing young workers on good jobs?

We are going to look at two actual case studies of young workers who came to one of the Ohio State employment services Youth Opportunity Centers for help in getting a job. These cases--the names are fictitious--will give you some insight into the policies and procedures of the State employment services. The experiences of these young workers, reported on the next pages, are told by their employment counselors. As you read each of these cases, see if you can find some of the answers to the questions we asked above.

CASE #1 SALLY GREEN

"Sally Green, who was nineteen, first came to the office seeking some sort of factory work. She followed the usual procedure of filling out an application and then was interviewed.

"During Sally's visit to the office, the interviewer noted the following information: Sally was an above-average student at a small Northeastern Ohio high school. She tended to do best in courses like Shorthand (A), Typing (B), and General Math (B), History (2 B's), and English (C and 2 B's). Her weakest areas seemed to be Science (2 C's) and Languages (D and 2 C's) with the exception of French I in which she earned an A in summer school. In the beginning of her junior year, at the age of sixteen, Sally quit school and got married. She now has two children. Her husband left school in the sixth grade and can neither read nor write. He works at a plastics factory and earns $240 a month. The family had recently acquired extra expenses and Sally felt that she must work to supplement their income. She took a job as a store clerk at a dairy store where she trippled as a waitress, cashier, and cleaning woman--all for $1.00 an hour. This job lasted only three months when she had to quit because of difficulties with her babysitter.

"On her first visit, we found nothing suitable for Sally in factory work. She left the office thinking that perhaps she would find a job on her own.

"Two months after the initial interview, she returned for her second visit to the office. This time the interviewer felt that Sally could benefit from some guidance from an Employment Service counselor since she expressed an interest in training but was uncertain about the choice of training. Sally spent almost an hour with the counselor exploring areas of interest, school and work experiences, and occupational information. She was pleased to find someone who would take time to help her think through what she wanted from work and life and assist her in planning a way to obtain her goals. Results of an interest checklist inventory which Sally's counselor gave her seemed to indicate the Sally's chief occupational interests were in the areas of bookkeeping and clerical work. She also expressed interest in writing, sketching, and baking. The areas she seemed to dislike most were sales, laboratory, and mechanical work. At this point, the counselor gave Sally some occupational information concerning the areas in which she had shown interest. Sally discovered that the counselor was able to provide some facts about the work she was interested in, including job opportunities, pay, working conditions, and requirements for entry. (The counselor used the OCCUPATIONAL OUTLOOK HANDBOOK and the EMPLOYMENT INFORMATION SERIES, which contain specific job descriptions.)

"On the basis of school achievement, interests, and occupational information, Sally's decision was to apply for a clerk-typist training course. Since she and her husband lacked funds, she was happy to learn under the Manpower Development and Training Act she could receive free training.

"The YOC helped her to find a stop-gap job until the clerk-typist course was scheduled to begin. She worked as a waitress for one month; then as a toy demonstrator (two nights a week) for a month.

"In November, Sally had a final interview for clerk-typist training. She began training two weeks later at the local Manpower Development and Training Center. In April, the Ohio State Employment Service testing department administered some of the standard typing tests to her and she achieved a score of 50 words per minute.

"At the end of the training course, Sally came into the office again to look for general office work. She had received a good rating from the training center and had also passed the city, state, and federal tests for a clerk-typist. She had also received a high school equivalency certificate. Sally was referred to a local university and was hired as a clerk-typist at $260 a month."

Question: Briefly outline some of the services that the Ohio State Employment Service provided for Sally Green.

SG-1. _____

SG-2. _____

SG-3. _____

* * *

CASE #2 CARL STANLEY

"Carl Stanley came to the Youth Opportunity Center after having spent more than two years in juvenile institutions in Ohio. He had been involved in petty theft and was finally sent to the Boys Industrial School (BIS) for incorrigibility. From there he was sent to the Training Institute of Central Ohio (TICO), where he received training in Cooking and Auto Mechanics. It was not till six months after his release on parole, that he came to the Ohio State Employment Service's Youth Opportunity Center for help.

"Carl's work history indicated that after his release from the correctional institution he had quickly gotten a job as a banquet waiter at a local hotel and had worked for one month. He had left the job because of "too little pay,"--he had been getting 91¢ an hour. He next worked for three days at a drive-in restaurant as a dishwasher for $1.00 an hour and left that job because of a "misunderstanding." His last job had been that of laborer in a foundry where he worked as a shake-out man, specifically cleaning dirt off molds by shaking and brushing them. He made $2.04 an hour but he was "laid off" this job.

"Further exploration by the interviewer gathered additional background information. Carl was 19 years old, one of two children; he had an older sister, and his father had seldom lived in the home. His mother had raised them with the help of relatives and welfare assistance. Carl had been in the junior year of high school when he was sent to BIS. He finished his junior year in the BIS and TICO. He had gotten married since his release but was not living with nor supporting his wife. He stated he was interested in getting a job as a service station attendant.

"When no appropriate job was discovered in our files, Carl was referred to an auto wash but was not hired. Subsequently, he was referred to a uniform rental agency as a laborer, but was not hired. Later he was called in to take a test for a company that was looking for machine operator trainees. However, he did not report for the test.

"About a month later he was back in the office, and because the interviewer felt he did not make a good impression and was unsure of his choice of work, he was referred to the counseling department.

"Initially, the counselor explored with Carl his interests. The youth stated he wanted a chance to be a grill cook. The counselor set the stage by calling an employer, telling him of Carl's juvenile record, and arranging an interview. Because Carl was dressed in dirty trousers and was not clean shaven, the counselor advised him to go home and clean up before going to the interview. He was specifically advised to cut and clean his long fingernails. He ignored the counselor's advice and was not hired when he went to the job interview. When Carl returned to the YOC office a few days later, he said he felt he had been refused the job because of his race. The counselor suggested this was the easy way out, that if Carl had made sure his appearance was unobjectionable, this might be the case, but he could not be sure. The importance of a person's appearance and the first impression a person makes were discussed. Subsequent counseling of this youth directed towards changing a negative attitude, reflected in his dress, appearance and behavior was largely without any results. Although Carl acknowledged the need for him to make changes in his approach to employment, he never put these things into practice. Later in the counseling process, Carl expressed an interest in a local Manpower Development Training Act instructional program (courses for Building Maintenance and Stock Clerk were scheduled at the time) and as a result he was given the General Aptitude Test Battery. However, he refused training on learning he would only get a small allowance instead of wages during the training. Out of town training in the Job Crops was also discussed but rejected by Carl because he did not want to leave the city. He asked to again be referred to a job.

"Carl obtained a job at a "pancake house" but the job lasted only three days before he was fired. He told his counselor that "I did not fry the bacon crisp enough." After this job experience, the counselor discussed with Carl the possibility that he was better fitted for some other type of work. Carl agreed to trying a different type of job and he was referred to a factory as a trainee in a motor repair shop. He was not hired. Carl returned to his counselor discouraged and ready to quit trying to work at all. "I don't really have to work," he stated. The counselor spent some time talking with Carl and he left with his spirits apparently lifted. Later that same day, Carl returned to see the counselor. He announced that he had gotten a job on his own as a bus boy at a restaurant. He was very proud that he had gotten the job by himself.

"It turned out that Carl worked only one day as a bus boy before being fired for picking up a waitress's tip. He told the counselor later that he had not meant to keep the tip but only to save it for the waitress. After this experience, the counselor tried again to get Carl to see how his actions were defeating his stated purpose of getting and keeping a job. Not long after this he quit coming to the OSES. A notice sent to him by his counselor came back with the notation "Moved--Left No Forwarding Address"."

Questions: Please check the correct answer.

CS-1. Your State employment service requires workers to take the jobs to which they are referred. True _____ False _____.

CS-2. The YOC will guarantee every young person a job. True _____ False _____.

CS-3. If you fail to get a job that your State employment agency refers you to, you are no longer eligible for its services. True _____ False _____.

* * * * * * * * * *

Today's Lesson in Brief

Public and private employment agencies, labor unions, direct application to employers, friends, relatives, newspaper want ads, and chance contacts are sources of help for you in finding a job. You can use one or all of these aids in seeking employment. Some of these forms of assistance such as those offered by your State employment service--are more valuable than others in that they provide counseling services and information on training opportunities as well as job placement.

HUMAN RESOURCES ERA
PRESENT

INDUSTRIAL ERA
1890's-1960's

AGRICULTURAL ERA
TO 1890's

In the Human Resources Era, employment opportunities are excellent for those who have or can get marketable skills. "Employability"--having the skills, attitudes, and values that employers require of their workers--is the key to your getting and keeping a job in the American economy.

Portrait of the Unemployed

You learned that there are many thousands of unemployed workers in the U. S. Economy. But what do you know about the personal characteristics of these unemployed workers? Are they men or women? Young or old? White or nonwhite? Skilled or unskilled? High School graduates or dropouts? Information about the unemployed may be of general interest to you as a citizen and also prove useful in making personal occupational decisions.

* * * * * * * * * *

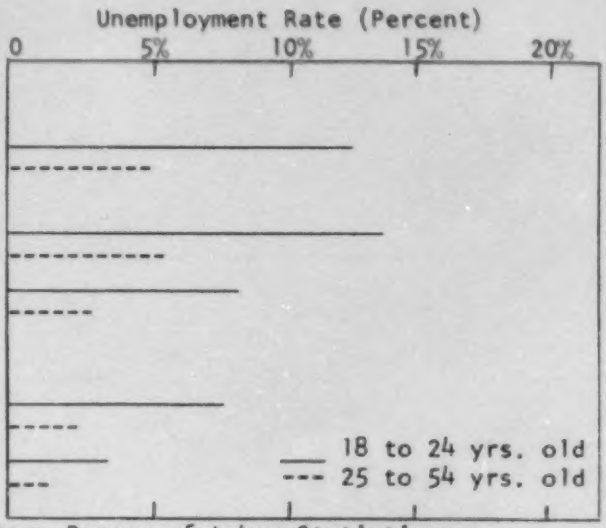
During the early 1960's the number of unemployed workers in the American economy averaged more than 4,000,000 men and women each year. Between 1958 and 1964, the unemployment rate (number of unemployed workers as a percent of the total labor force) was always above 5%. Even when our economy is working very well--close to full capacity--we still have about two million unemployed workers. (This number of jobless workers is sometimes called "frictional unemployment," a topic that is discussed in another lesson.)

Who are these jobless workers? What particular characteristics seem to "select" these men and women for unemployment? What kinds of workers face the highest risks of unemployment?

For answers to these questions, we can turn to the abundance of manpower statistics compiled by the U. S; Department of Labor and the cooperating state government agencies responsible for "employment security." There are data, for example, showing the personal characteristics of the unemployed and rates of unemployment for men and women in various occupations.

Chart I on unemployment and schooling (see next page) shows that about 13% of all young workers (age 18-24) with eight years or less of schooling were unemployed in March of 1970. The jobless rate for older workers (age 25-54) with the same amount of schooling (8 years or less) was about 5%.

Chart 1. UNEMPLOYMENT AND SCHOOLING, MARCH 1970



SOURCE: U. S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook, 1972-73 Edition, p. 21.

Questions: Does this chart show any connection between unemployment and schooling? If so, how do you explain the relationship?

* * *

Table 1 reports unemployment rates by age, sex, and color for a recent year. It shows, for example, that in 1971, one out of every 17 white females in the labor force was unemployed (6.3%); whereas one out of every three nonwhite females 18-19 years old was unemployed (33.7%).

Table 1. UNEMPLOYMENT RATES BY AGE, SEX, AND COLOR, 1971

Sex and Age Group	White (%)	Nonwhite (%)
MALE (16 years and over)	4.9%	9.1%
18-19 years	13.5	26.0
20-24 years	9.4	16.2
25-34 years	4.0	7.4
35-44 years	2.9	4.9
45-54 years	2.8	4.5
55-64 years	3.2	4.7
FEMALE (16 years and over)	6.3%	10.8%
18-19 years	14.1	33.7
20-24 years	8.5	17.3
25-34 years	6.3	10.7
35-44 years	4.9	6.9
45-54 years	3.9	4.2
55-64 years	3.3	3.5

SOURCE: U. S. Department of Labor. Manpower Report of the President, March, 1972. p. 178-179.

Questions: What definite patterns show up in the data in Table I? Is there any special significance in the unemployment rates that are boxed?

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You can also study the characteristics of the unemployed by looking at Table II showing the unemployment rates of different occupational groups. These statistics indicate, for example, that in 1966 only one out of every 100 professional and technical workers was unemployed (1.0%), while the jobless rate for general laborers was seven out of every 100 (7.4%).

TABLE II. UNEMPLOYMENT RATE BY MAJOR OCCUPATION GROUPS, SELECTED YEARS, 1960-71 (Percent Unemployed)

Major Occupation Group	1960	1963	1966	1969	1971
TOTAL, ALL GROUPS	5.5%	5.7%	3.8%	3.5%	5.9
Professional and technical workers	1.7	1.8	[1.3]	1.3	2.9
Managers, officials, and owners	1.4	1.5	1.0	.9	1.6
Clerical workers	3.8	4.0	2.9	3.0	4.8
Sales workers	3.8	4.3	2.8	2.9	4.3
Craftsmen and foremen	5.3	4.8	2.8	2.2	4.7
Operatives	8.0	7.5	4.4	4.4	8.3
Private household workers	6.4	5.8	4.1	3.6	4.5
Service workers (except private household)	7.4	6.3	4.8	4.3	6.6
Farmers and farm laborers	2.7	3.0	2.2	1.9	2.6
Laborers (except farm and mine)	12.6	12.4	[7.4]	6.7	10.8

SOURCE: U. S. Department of Labor, Manpower Report of the President, March 1972, p. 179.

Question: Do these statistics suggest that there is any relationship between the rate of unemployment and the level of skill? What is this relationship?

Perhaps you can see the full meaning of all the data we have presented if you would look at it again and answer the following question:

Which of the following types of persons is most likely to be unemployed? (Put a check (✓) in the blank next to the right answer.)

_____ young worker	or	_____ old worker
_____ dropout	or	_____ high school graduate
_____ white worker	or	_____ negro worker
_____ female white worker	or	_____ female negro worker
_____ young female negro worker	or	_____ young female white worker
_____ skilled blue-collar worker	or	_____ unskilled blue-collar worker

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The portrait of the unemployed which you have examined suggests that the following types of workers are much more likely to be found among the unemployed: the risks of unemployment are highest for the unskilled, the young, the dropout, and the nonwhite.

A simple way to picture the barriers to employment faced by the workers who have these personal characteristics, is to remember that these workers have hurdles twice as high to clear in order to get and keep a job. Unemployment rates for each of the four groups listed above on the average has been twice as high as those of their counterparts. These workers have "double trouble" in getting and keeping a job.

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Today's Lesson in Brief

Who are the unemployed--the "casualties of the manpower revolution?" They tend to be the uneducated, the unskilled, and those who are discriminated against. (Often the same people are included in all of these categories.) The uneducated lack the primary communication, computation, and other skills to obtain employment. The unskilled lack the know-how and work experience required by a changing technology. Others are discriminated against because of their age, color, or sex. Increased investment in human resources and more equal opportunities in the manpower market can help improve the employability and earnings of men and women having these "high-risk" characteristics.

Help for the Unemployed

During the 1960's the number of unemployed workers in the American economy varied about 4,000,000 to 6,000,000 each year. What policies and programs have been adopted to deal with the problems of unemployment? Knowing what business firms, labor unions, federal-state-local governments are doing to assist unemployed workers will help you evaluate these programs as a citizen and also acquaint you with the types of help you might someday need if you become a jobless worker.

* * * * * * * * * *

Public policies designed to deal with unemployment problems include programs to provide additional jobs in the economy; programs of manpower training; programs to help workers find jobs; and programs to provide income for workers who are temporarily unemployed.

* * *

First, let's look at a pair of "tools" that the federal government has available to deal with unemployment, especially cyclical unemployment. The use of these tools--taxing and spending policies that affect the TOTAL DEMAND for goods and services in our economy--is called "fiscal policy." An increase in demand (total spending) for additional output will bring about some increase in the total demand for workers to produce the additional goods and services. Do you recall our formula for counting the nation's total output of goods and services? It was this: C + I + G +Xn = GNP, where C, I, G, Xn represent the four groups of buyers of our nation's output. It is the spending of consumers, business firms, government, and foreigners that determines the total amount of GNP produced by the economy. This formula will be helpful in understanding how the tools of fiscal policy are used to combat unemployment.

The amount of income (and spending-power) of three groups of buyers (not foreigners) can be greatly influenced by the spending and taxing policies of the federal government. For example, the government can reduce corporate taxes in order to stimulate investment purchases of capital equipment by business firms. It can also reduce the rate of the personal income tax to put more purchasing power into the hands of consumers. The federal government can also increase the size of its own expenditures, and also the funds it gives to state and local governments for such items as schools and highways.

All of these policies have the effect of making more income available to consumers, businesses, and government--the buyers of 95% of our output--who in turn tend to spend the largest share of this additional income. When they buy additional amounts of output, these three groups increase the demand on business firms to supply the additional output. Business firms in turn will hire additional workers to help produce the extra output that is demanded. The total number of jobs in the economy is increased. Additional workers will be hired, and this reduces the amount of unemployment.

Question: What are some of the limitations of fiscal policy as a tool to combat unemployment? (HINT: Do business firms and consumers always spend the extra money they have on hand?)

* * *

The federal and state governments have also developed special programs to provide additional jobs for unemployed workers. For example, the federal government has several programs designed to deal with structural unemployment by moving workers to where the jobs are, bringing jobs to where the workers are, and giving the workers the skills needed to get jobs. You will recall that solving the structural unemployment problem involves matching workers (who are left behind because of geographic, occupational, and industrial changes) with new job opportunities. Approaches used by the federal government to deal with this problem include trying to bring new job opportunities to the unemployed--for example, by encouraging plant location in depressed areas as provided in the Public Works and Economic Development Act of 1965. This law helps depressed areas having high unemployment rates to get the facilities needed to attract business firms to the area. The Manpower Development and Training Act of 1962 helps provide workers with skills required to get jobs and pays allowances to the trainees. In addition, the federal and state governments have programs to help workers find jobs that already exist. For example, the Public Employment Service, which we have discussed before, obtains information of job vacancies and then provides counseling, testing, and placement services for unemployed workers who request its help.

To summarize, there are government policies and programs designed to increase the total number of jobs in the economy as a whole (through fiscal policy); to provide extra jobs in particular depressed areas; to train workers so they can qualify for newer job opportunities; and to provide information to help workers find existing jobs.

Question: Which of these four approaches to helping the unemployed do you think is most helpful to the individual worker? To solving the nation's unemployment problem? Why?

* * *

Now let's consider another side of the unemployment problem. What happens when jobs can't be found? What do workers live on when they are unemployed? This is where unemployment insurance enters the picture. Three-quarters of all the wage and salary workers in the United States are covered by Unemployment Insurance (sometimes called Unemployment Compensation). This joint federal-state program (established in 1935 under the Social Security Act) provides payments to eligible unemployed persons for specified periods of time. State-administered funds, obtained through payroll taxes paid by employers, are the source of revenue for these programs. The levels and duration of the benefits paid, and the tax rates paid by employers, vary among the states. Unemployment insurance (UI) plays a key role in aiding the unemployed. It provides more income to more unemployed persons than all other programs of aid combined. Total benefits were 4.1 billion for the nation as a whole in 1970. Weekly benefits ranged between $40 and $86 for each eligible worker. UI supplies the unemployed with purchasing power when they need it most and helps carry them over while they are seeking new employment. This extra purchasing power also helps increase the level of total demand in the overall economy.

Discussion Question: Why is Unemployment Insurance so important to the unemployed worker? To the economy as a whole?

* * *

The programs created by private industry for dealing with unemployment are characterized by fitting the benefits to particular situations and pioneering in new directions, rather than along established lines of public programs. We will describe three of these programs: Supplementary Unemployment Benefits, Severance Pay, and Early Pensions.

A Supplementary Unemployment Benefit plan (SUB), as its name indicates, is one that supplements or adds to the benefits paid by the public employment insurance programs. These SUB programs came into being as a result of negotiations between labor unions and management. Leading unions such as the United Auto Workers and the United Steel Workers felt that the amounts and duration of benefits under pulic UI programs were not adequate. The wanted their members to receive additional compensation when they are unemployed and persuaded the companies to set up a SUB program. As of 1964, about 2½ million workers were covered by SUB plans, in some cases paying benefits of $50 or more per week in addition to regular Unemployment Insurance benefits.

Severance pay consists of one lump-sum payment made by an employer to an employee when his job is terminated by the company. Because the worker is considered to have a kind of "property right" in his job, the benefit is paid to compensate him for the loss of that property right. By the end of 1963, about 35% of all workers under union collective bargaining agreements were covered by such plans. Benefits under severance pay agreements differ greatly from firm to firm, paying from $50 or $100 up to $1,000 or more, depending on years of service to the company.

Some private business firms, often with prodding from labor unions, have established private pension plans which allow workers to retire earlier than the usual retirement age of 65. This provision for early retirement is especially helpful to older workers who are laid off or lose their jobs, because they often have trouble finding another job. Usually, the early retiree is paid less than the full pension he would get if he retired at age 65. But when early retirement is not completely voluntary, some plans pay the full amount until the retiree becomes eligible for Social Security benefits. In recent years, because of the increasing number of jobs being eliminated by technological change, more labor contracts have contained this latter provision.

Discussion Question: What do you think are the strengths and weaknesses of these private programs for dealing with unemployment?

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Today's Lesson in Brief

There are several different types of governmental and private programs for dealing with unemployment problems. Government programs have been developed to deal with both general and specific types of unemployment. These include: increasing the total number of jobs available throughout the economy (by using fiscal policy to increase total demand for goods and services); creating new job opportunities in particular areas; training or retraining the unemployed; supplying information on job openings; and providing unemployed workers with temporary income through Unemployment Insurance benefits while they look for a new job. Private programs are designed to deal with unemployment caused by the operation of specific firms and industries. These include such plans as supplementary unemployment benefits (SUB), severance pay, and early pensions.

What Do Employers Expect From Their Workers?

To get and hold a job, a worker has to meet certain requirements set by his employer. These include not only particular skills, but also personal qualities that the employer believes the worker must have to be successful on the job. A worker who knows what employers expect and require can develop skills and attitudes that will help him obtain employment by being prepared for the all-important job interview.

* * * * * * * * * *

There are several different ways of finding out what employers expect from their workers. One approach is to look at the method employers use for hiring new employees. Usually a prospective worker is first asked to fill out a job application form. This form asks for some personal information about the worker which the employer thinks will be helpful in deciding whether or not to hire him. The employer learns several valuable things about the worker from the information that is put on the application form. For example, he learns something about the communication skills of the potential employee--can he read and follow directions, and does he write or type neatly?--and whether he can complete a simple task. Information on the worker's education, training, and prior work experience is also obtained.

If the worker's completed application suggests that he is qualified for the job, he may then be given a personal interview. This interview will involve the prospective employee and at least the employer or one of his representatives (e.g., job interviewer or personnel manager). The interview may also include a supervisor that the employee would work with if he is hired. The employer or his representative will usually begin the interview by asking some questions about the information given on the job application form which he finds interesting or on which he may want more details. The interviewer will listen very closely to the answers that are given, paying attention not only to what he said, but how he says it. The prospective employee, in turn, is given an opportunity to ask questions about the work he he is expected to do if he is hired. For some kinds of jobs, the interviewer will evaluate the prospective employee on the basis of what type of question he asks. Is the worker interested primarily in opportunities? promotions? pay? fringe benefits? hours? or working conditions?

What have we learned so far about the question posed in the title of today's lesson? The use of job application forms as one of the means of screening workers suggest that employers expect their employees to be able to follow directions and fill out simple forms neatly, clearly, and thoroughly. These application forms almost always ask about education, training, and work experience; therefore we know that employers are interested

in the type and amount of skills a worker has. The fact that employers sometimes insist on an interview with the prospective employee points out the importance of communication and human relations skills. Employees are expected not only to be able to express themselves, but also to have skill in listening to others and following instructions.

Discussion Questions: How can you learn how to fill out a job application form and participate in a job interview? What mistakes do you think workers might make in their job interviews?

* * *

Another way of finding out what employers expect from their workers is to examine the type of questions they ask prospective employees when they actually interview them. The purpose of the interview is primarily to get information from the worker which will help the employer decide whether or not to hire him. (A secondary purpose is to gain information about the potential employee's attitudes and values.) What are the concerns of employers as reflected in the questions they ask during the interview? Here are some. (Please add some additional questions that you think employers might ask.)

-- What are your future vocational plans?

-- What qualifications do you have that will make you successful in this job?

-- Can you follow instructions without feeling upset?

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--

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* * *

Although workers must have specialized knowledge, particular skills, and work experience to qualify for some jobs, many employers place 75% to 85% of the emphasis in their hiring practices on personality and character qualifications. This attention to personal attitudes and characteristics is especially prevalent when hiring young workers.

Reports published by business firms and by the U. S. Employment Service indicate that employers want their workers to be dependable, cooperative, industrious, loyal to the enterprise. Can you list some additional personal characteristics and attitudes that you think employers would want their employees to have?

-- Initiative --

-- Cheerfulness --

-- Pride in their work --

-- --

* * *

Industrial sociologists point out that the expectations of workers and employers differ as to what will take place in the work place and on the job. How are differences explained? First, because of differences in attitudes and values among people; and second, people have different ways of defining and expressing the same attitude and values. (The subject of "value conflicts" will be discussed in later lessons.)

This difference in expectations gives rise to job-adjustment problems. The nature of these problems gives us another insight into what employers expect from their workers. A study made a few years ago found that the following were the most frequently mentioned job-adjustment problems of young white-collar workers:

-- Willingness to start at the bottom, regardless of education; realization that personal advancement requires hard work, often on routine and seemingly unimportant tasks.

-- Learning to get along well with supervisors and fellow workers; adjusting to the personalities of others; working cooperatively with men who have less schooling and more experience.

-- Learning to live on a lower salary than was expected, and accepting the fact that advancement may be slow.

-- Developing efficient work habits: ability to work independently, not trying to do everything at once, careful planning of time.

Question: Why do you suppose that employers and employees expect somewhat different things in the work place and on the job?

* * *

Another insight into what employers expect from their employees can be obtained from the research that has been done on the reasons why workers are fired. One finding that all these studies agree on is that in most cases (60% to 90%) the chief reason for dismissal is a shortcoming in personal traits, not technical skills. (Emotional and social weaknesses rather than technical incompetence is the reason why most workers are fired.)

Industrial relations studies reveal that the following attitudes and values are among those that get workers fired:

-- Inability or refusal to follow instructions	LIST SOME OTHERS:
-- Laziness	--
-- Unexplained or frequent absences or tardiness	--
-- Carelessness	--

* * *

Let's summarize what we have learned about the expectations employers have about their employees. Employers want workers who have the training, experience, and technical skills needed to do the job. In addition, employees are also required to have certain personal traits needed to perform their work. Attitudes and values that employers expect from their employees include: cooperation, dependability, efficiency, loyalty, initiative, and cheerfulness.

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Today's Lesson in Brief

Employers expect their workers to have both the skills and the personal characteristics needed to perform their jobs in an efficient manner. A knowledge of what employers expect from their employees will be useful to you in getting a job and being successful in your work.

THE STUDENT

THE NATURE OF WORK

Education and Work: A Means of Discovering Yourself

Your education and work experiences can help you learn more about yourself and the goals you want to achieve in life. Economic and manpower information can be useful to you in planning a career. Understanding how our economy operates--and the role that people play in economic life--will be valuable to you in obtaining your personal goals.

* * * * * * * * * *

The case studies that follow are true. They involve real people and illustrate some of the problems and opportunities that you may be faced with in the next few years. As you read these case studies, ask yourself what each of these people did or did not do that created the situation in which they found themselves.

CASE #1 "No Love for the Iron Horse"

"In 1940 I heard they were hiring people at the automobile assembly plant. I figured I'd get a job and then, with the electrician experience I got in vocational school, I could work my way up to a good job. The idea of making automobiles sounded like something pretty important. Lucky for me, I got a job and was made a spot welder. There wasn't much to the job itself. I picked it up in about a week. Later I was drafted into the Army. When I came back in 1946, I tried to get into the Maintenance Department as an electrician, but there was no opening. So I went back to the assembly line--we call it the 'iron horse'. They made me a welder again, and that's what I've been doing ever since.

"My job is to weld the hood to its metal underbody. I take a job off the bench, put it in place, and weld the parts together. The job is all made up, and the welds are made in certain places along the metal. Exactly twenty-five spots. The line runs according to schedule. Takes me one minute and fifty-two seconds for each job. The cars differ, but the job is practically the same thing every time. Finish one car and then have another one staring me in the face.

"I don't like to work on the assembly line--no man likes to work on a moving line. You can't beat the machine. Sure, maybe I can keep it up for an hour, but it's rugged doing it eight hours a day, every day in the week all year long.

"When I'm working there is not much chance to get a breather. Sometimes the line breaks down. When it does we all yell 'Whoopee!' As long as the line keeps moving I've got to keep up with it. On a few jobs I know some fellows can work up the line, then coast. Most jobs you can't do that. If I get ahead maybe ten seconds, the next model has more welds to it, so it takes ten seconds extra. You can't win. You're always behind.

"I like a job where you feel like you're accomplishing something and doing it right. When everything's laid out for you and the parts are all alike, there's not much you can accomplish. The big thing is the steady push of the conveyer--a big machine that I can't control.

"It's hard to feel that you're ever doing a good quality job. There's a constant push, at high speed. You may improve after you've done a thing over and over again, but you never reach a point where you can stand back and say, 'Boy, I done that one good. That's one car that got built right.' If I could do my best I'd get some satisfaction out of working, but I can't do as good work as I know I can do."

Questions

1. Why do you think this worker feels the way he does toward his job?
2. How do you think you would feel if you were a worker on the 'iron horse' assembly line?

* * *

CASE #2 "The Dropout Who Came Back"

"Joe Sorrentino has 25 scars on his hands to prove that he is a street fighter. By the time he was 20, he had flunked out of high school four times, had been booted out of the Marines, and had lost 30 jobs. The second oldest of seven children, Joe always wanted to be an 'achiever', and in his neighborhood an achiever had to be handy with his fists. A veteran of more than 100 rumbles, Joe was put on probation by a juvenile court after one particularly bloody street fight. When he was in his first year of probation, he flunked out of high school. Not long after he enrolled in another high school at night--he failed there also. In a third try at high school he didn't last a semester.

"At 14, Joe had begun trying his hand at various jobs, achieving a record for failing which was 'better' than even his school career. On his first day at work at a bleach factory, he attempted to carry 10 gallons of bleach to a truck he was loading and dropped all 10. Joe later worked in a sweater factory, where he had the embarrassing experience of being awakened from a nap by the President of the company. Another job opportunity for Joe came through a furniture company's ad in the newspaper which read: 'Want ambitious young man who seeks responsibility.' After a month of aligning wheels of teacarts, he got tired of responsibility.

"Joe enlisted in the Marines when he turned 18 but could not stand the discipline, and rebelled. He fought with recruits, rioted in the mess hall, and tried to run away. Judged an 'incorrigible' by the Marines, he was sent packing with a General Discharge. Back home, he was a hero to his old street-gang buddies. But within himself, Joe felt ashamed. At 20, he came to realize that his only chance for a better life was through education. So he went back to high school, for the fifth time, at night, working days in a supermarket. After two years, he graduated with the highest average in the night school's history.

"Despite only fair results on college entrance exams, his grades got him admitted to the University of California. At first, Joe felt he had nothing in common with the college youths who talked about summer vacation and beach parties--things he knew nothing about. But he stuck it out and in his senior year, was elected president of the student body. After graduating with honors, Joe went back into the Marine Corps for two years, feeling that he had to make up for his past record. He did. This time he became a platoon leader, highest scorer in athletic competition, and changed his General Discharge to an Honorable one.

"In June of last year, 30-year-old Joe Sorrentino was valedictorian at Harvard Law School. Joe has received several offers to work for major U. S. law firms. Instead, he wants to serve a term as an assistant U. S. or State attorney in California."

Questions

1. Identify some of the attitudes and values that Joe had before he finished high school, and compare them with his later outlook on life.
2. What can we learn from Joe's case about job opportunities and the economic rewards that are available in our economic system?

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CASE #3 "Skill and Satisfaction"

"I'm a die designer. We draw up the prints when somebody has a bright idea for a new die. Dies are tools that are used in the plant for shaping material for machine production. They come around to the planner and ask him whether or not we should work on it. They then give it to us and we have to design a die that will compete with one that they might have had designed outside the firm.

"I used to make dies, that's how I got started. I came to XYZ Corporation for my apprenticeship right out of high school. I had a friend whose father was a supervisor and this fellow started in here. In those days employment was tight and it wasn't easy to get a job, but I came in after my friend did. He told me about it and managed to get me in. But I wasn't doing tool and die work then. They started me on the assembly line. I worked on the line nights. But after I was in the plant for a while I looked around and I thought that I'd like to go into die work.

"You'd walk into the die shop and it was always so neat and clean. They clean the machines up every weekend. The floors were always clean. Well, one of the supervisors thought I could learn the work so he took me on as an apprentice. I had to take a cut in pay but it was worthwhile. So I started at the bottom. Along with your work on the job you were supposed to go to school at night. We started there by taking what they called a five-year course. I finished it up in 2800 hours. That meant some going. They taught us all that an engineer learns, but from a practical standpoint.

"I'm always trying to do the best job I can. XYZ is my company. I'm going to stick with them until they cross me up. Until now they've been very good to me. If the work I do doesn't satisfy them, well, that's just too bad. I always do the best work I can.

"When I got back from the Army after the war I thought I should be in a higher position. I never said anything about it but one day the boss called me into his office and he asked me if I wanted to be a designer. I had never been any great shakes at drawing in school but I figured I'd have a go at it. Well, that's what I'm doing today and I'm one of eight in the whole plant. What I draw and design in eight hours makes enough work to keep production men busy for fifty or sixty hours.

"The engineers in our firm who are college graduates have to come to me to ask questions. I won't take anything away from them, they're smart. They know all about stresses and strains but when they want something done they have to come to me. That's something I'm very proud of."

Questions

1. How would you describe this worker's attitude toward his job? Toward life?
2. Do you think this worker has achieved success? Why?

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Today's lesson, and many others in this course, will help you think about your place in the manpower market and the economic world. By providing you with economic information and asking some key questions, we hope that you will become interested in learning about the changing economy, the role that work plays in man's life, and the relationship between economic life and human development.

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Today's Lesson In Brief

Jobs and education can be a means of understanding yourself and developing your human capabilities. Knowing how our economic system functions can help you understand an important part of your environment--modern technology and the larger social world in which you live. This study of economics and work should prove to be a useful tool to you in achieving your life goals. Your chances of finding meaningful employment and building a life of purpose and fulfillment will be better if you prepare yourself now for tomorrow's opportunities.

The Joy of Work

One of the most important rewards of work is the sense of personal fulfillment and joy that results from a job that's well done. Learning how to find personal satisfaction from work will help offset the elements of boredom, discomfort, and other negative aspects that every job will have to some extent.

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Today's lesson consists of a series of nine cartoons that illustrate some important ideas and attitudes about work and the personal happiness and fulfillment that sometimes come from work. These cartoons appeared in the booklet, Satisfaction Guaranteed, published by The Connecticut Mutual Life Insurance Company, Hartford, Connecticut.

• • •

1. OH, WHAT A WONDERFUL FEELING.
Is work just "a necessary evil"? Or is it really "fun"?

2. AWAY FROM IT ALL.
Have you noticed that when you are absorbed in a job, minor problems and frustrations seem to disappear (at least temporarily)?

3. "HERE, BOSSY".
Work is something ambitious people are willing to do in order to achieve their goals. For those who are satisfied to stand still, Bossy's life seems ideal.

4. THERE'S NOTHING LIKE IT.
If you worked a 15-hour day, do you think you'd be worn out and miserable? Or satisfied and happy with a glow of accomplishment?

5. CAPTAIN OF INDUSTRY.
Is work simply a means to an end--$$$$? What role did work play in this man's life, before his wife talked him into retiring "to enjoy his money"?

6. WORKMANSHIP.
Do you think there is such a thing as "a human instinct of workmanship"? Who deserves credit for constructing this building?

IT SURE WOULD BE NICE TO HAVE YOUR OWN FARM AND STAY PUT
IT SURE WOULD BE NICE TO BE UP THERE FLYING ALL OVER THE PLACE EVERY DAY
RAMA

7. OLD STORY IN MODERN DRESS.
Is the grass really greener on the other side of the fence? How might the pilot and the farmer satisfy their wishes?

8. AUTHENTIC CHIP-AN-NAIL. After a busy day on the job, why do some people rush to their basement workshop as soon as dinner is over?

9. THE WINNING TICKET. (Fred X. Hustler won $100,000 in the Grand National Sweepstakes.) Is a life of ease really "the good life"? Or was Fred's life more meaningful when he was an active, ambitious salesman?

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Today's Lesson in Brief

The real people and real situations described in these cartoons suggest that work is a necessary part of life and can be a source of personal satisfaction, happiness, and fulfillment.

The Nature and Functions of Work

Throughout history men have had many different ideas about the nature and importance of work. Work has appeared to some people as "a necessary evil," a way of "making a living," or as a means of "expressing oneself." Let's review what work has meant to man through the years, and the functions that work can serve. We'll need to know the meaning of the terms--WORK, JOB, OCCUPATION, CAREER, AND LABOR.

* * * * * * * * * *

What is meant by the term WORK? The dictionary defines it as an activity in which one exerts strength or effort to do or perform something (the effort may be physical and/or mental). Work is the labor, toil, duty, function, or assignment which is often a part of a larger activity--like math homework, or household chores.

A JOB is a position in a particular plant or place or work. (Your uncle may have a job at a local General Electric plant.)

OCCUPATION refers to a group of similar work activities found in more than one place of employment. An occupation requires certain skills. (The building custodian in your school, and the carpenter helping to build a house in your community, are involved in an occupation.)

What is a CAREER? One definition is that this is a continuing pattern of productive activity demanding special preparation and undertaken as a life work. (The physician has a career in medicine, and your teacher has chosen a career in education.)

Can you think of some jobs, occupations, careers that you might like and some you would dislike? List three CAREERS you think you might like or dislike.

Like	Dislike
1--	1--
2--	2--
3--	3--

* * *

Work has two very basic ECONOMIC functions: to help produce goods and services, and also to provide the worker and his family with an income.

The first function of work--to produce goods and services--is so important and so obvious from the point of view of society as a whole, that we sometimes fail to recognize it. (So often we think of work from the individual point of view, as "a means of earning a living.") The value of work--or of LABOR, to use the technical term--was considered by economists to be so important that before the 1850's, they assumed that labor alone determined the value of goods and services. Economists still speak of "labor productivity" as if labor by itself were responsible for producing our total output even though we know that tools, equipment, and natural resources are also used in production. Labor is defined simply as all human effort devoted to production.

For most families in the United States, work is necessary to provide the income they need to maintain their standard of living. About two-thirds of the total income received by families comes in the form of wages and salaries paid for work.

* * *

Years ago, work was for most people strictly physical effort necessary for survival. (Even today, this is what work means to some Americans and to nearly all the people of Asia, Africa, and Latin America.) Later work became "what I do to earn a living for my family, to be able to pay rent or send the kids to college." Today, we know that work serves many purposes in addition to earning money.

What are some of the "Noneconomic" (not to produce goods and services or provide incomes) purposes of work? (Add a few more to this list):

1-- To have something to do and think about (a routine)

2-- To do something that will give me status in the community

3--

4--

5--

We'll talk more about these noneconomic functions of work in future lessons.

* * *

Ideas about work have changed through the ages, and in fact, the very nature of work itself has changed. Some scholars say the notion of work as drudgery is tied up with certain religious ideas of "working by the sweat of one's brow" as punishment for "original sin," and so work has come to be termed a necessary evil. But work can be a pleasure as well as a means of earning a living. (Do you recall lesson #10, "The Joy of Work?")

The nature of the type work we're now doing has changed through the ages. The following sketches show an example of how man, the skilled craftsman of the 1800's, made a complete chair, and then how methods changed.

With the beginning of factories and the assembly line, man started making just parts of a product. Present-day automation provides the modern worker with a set of buttons to push, or dials to operate instead of doing much manual work. We've seen the worker become more of a specialist; we've heard talk about the need for workers to have SKILLS. "No unskilled workers needed," is becoming the rule set by employers. With man freed from much strenuous manual labor and repetitious tasks through the use of machines, perhaps we'll see the worker of the future using his talents in quite different creative ways.

THE CHANGING NATURE OF WORK

CRAFTSMANSHIP

Making things was long and hard--but gave opportunities for personal creativity

ASSEMBLY LINE

Making things became physically easier--but more routine and monotonous. Work was unskilled with little chance for creativity. Shorter work-day; more leisure

AUTOMATION

New skills and fewer workers are required. Increased leisure time can be used creatively or wasted. More fringe benefits are available for the workers

(The pie charts in these sketches show how a worker divided his time among Work, Sleep, and Leisure in the years 1800 and 1900 and how he will probably divide his time in the 1970's. Note how the working day has been cut from 12 hours to about 8 hours.)

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Question: Are workers better off today with automation and increased leisure than they were in 1800?

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Today's Lesson in Brief

The nature of work has changed through the years. Today, work has three functions in American society:

-- to help produce goods and services.

-- to earn income so that the worker can maintain a high standard of living.

-- to fulfill some personal, noneconomic needs of the individual worker.

The Job: Satisfaction or Disappointment?

An important question to consider as you think about your future as an employed worker is whether you will find satisfaction in your job, or disappointment. Do the jobs we have really satisfy our needs? Or is there a "myth" of the happy American worker?

* * * * * * * * * *

Have you ever stopped to think about what feelings a worker has about his job--like your dad, or the secretary in the principal's office, or the mail carrier? Here are a few examples, and you can add some others you think of:

1. Good fellowship
2. Accomplishment
3. Frustration
4. Nervous strain
5. Appreciation of beauty
6. Boredom
7.
8.

For most people and most jobs, we can find both positive and negative feelings.

The following 12 factors show what it is that different people may want or need to get from their job. The extent to which these needs are fulfilled will help determine how satisfied a worker is with his job. Which factors seem most important to you?

1. ECONOMIC SECURITY. The need to feel assured of a continuing income and adequate level of living.

2. RECOGNITION AND APPROVAL. The need to have your work and other things associated with yourself known and approved by others.

3. MASTERY AND ACHIEVEMENT. The need to perform well according to your own standards and abilities. (This is very much like the famous "instinct of workmanship" stressed by the American economist, Thorstein Veblen, whose career extended from the 1890's to 1929. Veblen believed that people have a basic desire for activity that is directed toward the efficient achievement of a goal, and he wrote a book on the subject,)*

*Thorstein Veblen, The Instinct of Workmanship (And the State of the Industrial Arts). New York: MacMillan Co., 1914. Reprinted by W. W. Norton Co. as a paperback in 1964. There is a book about Veblen's life and his work that you might be interested in reading: Thorstein Veblen, by Douglas Dowd. New York: Washington Square Press, 1964, Paperback, 60 pages.

4-- DOMINANCE. The need to have some power or influence and control over others.

5-- SOCIO-ECONOMIC STATUS. The need to maintain yourself and family in accordance with certain community standards with respect to material ("money") matters.

6-- SELF-EXPRESSION. The need to have your behavior consistent with your self-concept--what you believe "you are." (Thorstein Veblen's "instinct of workmanship" comes to mind again in thinking about satisfying this need.)

7-- AFFECTION AND INTERPERSONAL RELATIONSHIP. The need to have a feeling of acceptance by and belongingness with other people; the need to have some people like you and love you.

8-- MORAL VALUE SCHEME. The need to feel that your behavior is consistent with some moral code or structure, so you can feel virtuous--that you are a good and worthy person.

9-- DEPENDENCE. The need to be directed by others to avoid feeling all alone and totally responsible for your own behavior.

10-- CREATIVITY AND CHALLENGE. The need for meeting new problems requiring initiation and imagination, and for producing new and original works.

11-- SOCIAL WELFARE (or ALTRUISM). The need to help others--to have your efforts result in benefits to others.

12-- INDEPENDENCE. The need to direct your own behavior--to "be your own man"--rather than to be completely subject to the control of others.

* * *

We can quickly see how jobs give us economic rewards for our work through earnings. But consider also how some of the other needs are met through certain jobs. When co-workers seem to like you (and they might even elect you chairman of a committee, or as a union representative), when your family appreciates you, and when you have friends, you are gaining RECOGNITION and experiencing satisfying INTERPERSONAL RELATIONSHIPS.

When you have created an attractive dress or a delicious meal, made a beautifully-styled wood stool or bookcase you feel MASTERY and ACHIEVEMENT and SELF-EXPRESSION. (Veblen says we make such small parts of a total object today, on an assembly line, or in an office, that we often have no way of feeling the mastery and pleasure of creating a total item--a "masterpiece.") The policeman may meet his DOMINANCE need through the influence he has over people in controlling the flow of traffic and preventing people from breaking the law.

The truck driver can feel both MASTERY and ACHIEVEMENT and DOMINANCE

over machines as he is able to control his huge truck and trailer to back into narrow places to get his heavy loads to and from destinations. The medical doctor gets satisfaction from helping others (SOCIAL WELFARE). Teachers feel CREATIVITY AND CHALLENGE in trying to present your lessons so they are interesting and meaningful to you.

A writer, an advertising design man, and a sculptor are other examples of CREATIVITY and CHALLENGE, MASTERY, and ACHIEVEMENT and the writer and design man also achieve DOMINANCE if their work influences others. INDEPENDENCE is shown by the business man who owns his own business, the executive, the personal secretary who may also be an office manager. Students are DEPENDENT on their teachers for motivation and direction.

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Discussion Questions

Which of the needs seem most important to you? (Remember, you are unique and your answers will probably differ from others in the class.)

Considering your job as students in school, how do you get some of these needs fulfilled?

Give some concrete examples of positive and negative feelings that workers have about their jobs.

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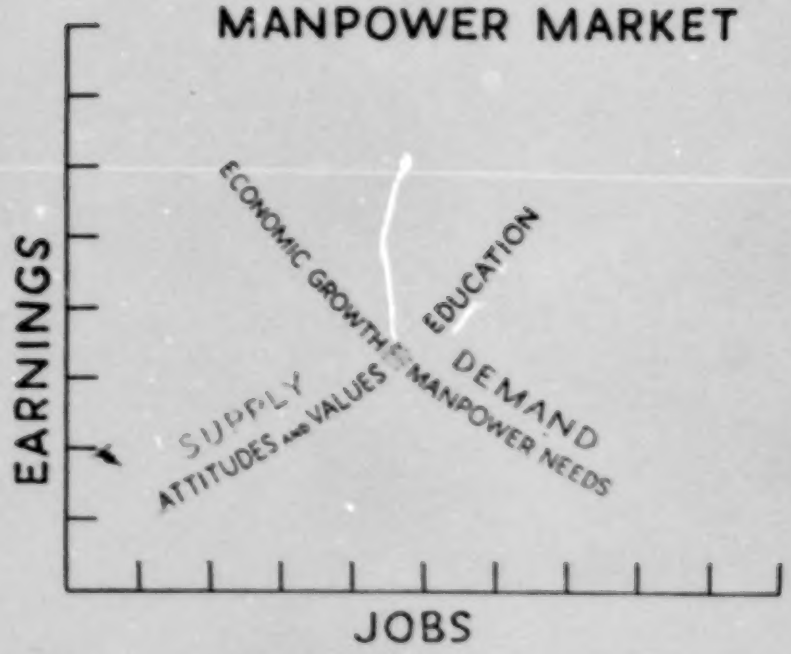
Today's Lesson in Brief

Each person has needs, desires, feelings, and talents that he brings to the job. He wants to earn money, but he has other human needs as well. "Man does not live by bread alone." Whether his needs are fulfilled--the amount of satisfaction he gets from the job--depends on the worker and the opportunity his job gives him to express himself and achieve his goals.

SUCCESS IN THE WORLD OF WORK



The attitudes and values and the education you bring to the manpower market will help determine whether you will be employed, how much you will earn, and also the amount of satisfaction (or disappointment) you get from the job.

Aspiration and Achievement

"Ah, but a man's reach should exceed his grasp,
or what's a heaven for?"

--Robert Browning

Aspirations are the hopes and dreams that men and women have--the goals we set, what we want from life and what we strive to achieve. What are the forces that determine your goals, and your "aspiration level?" How do aspirations develop, how do they change, and how does your notion of success and failure depend on your values and goals?

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Aspiration and Achievement are closely tied together; along with Ability and Action, these are the requirements for "success." We are going to explore the first A--ASPIRATION, which may be combined with Ability and Action to lead to ACHIEVEMENT. (Remember, Action is always necessary. Aspiration is not just what we say we want to accomplish but also our determination to work toward our goals.)

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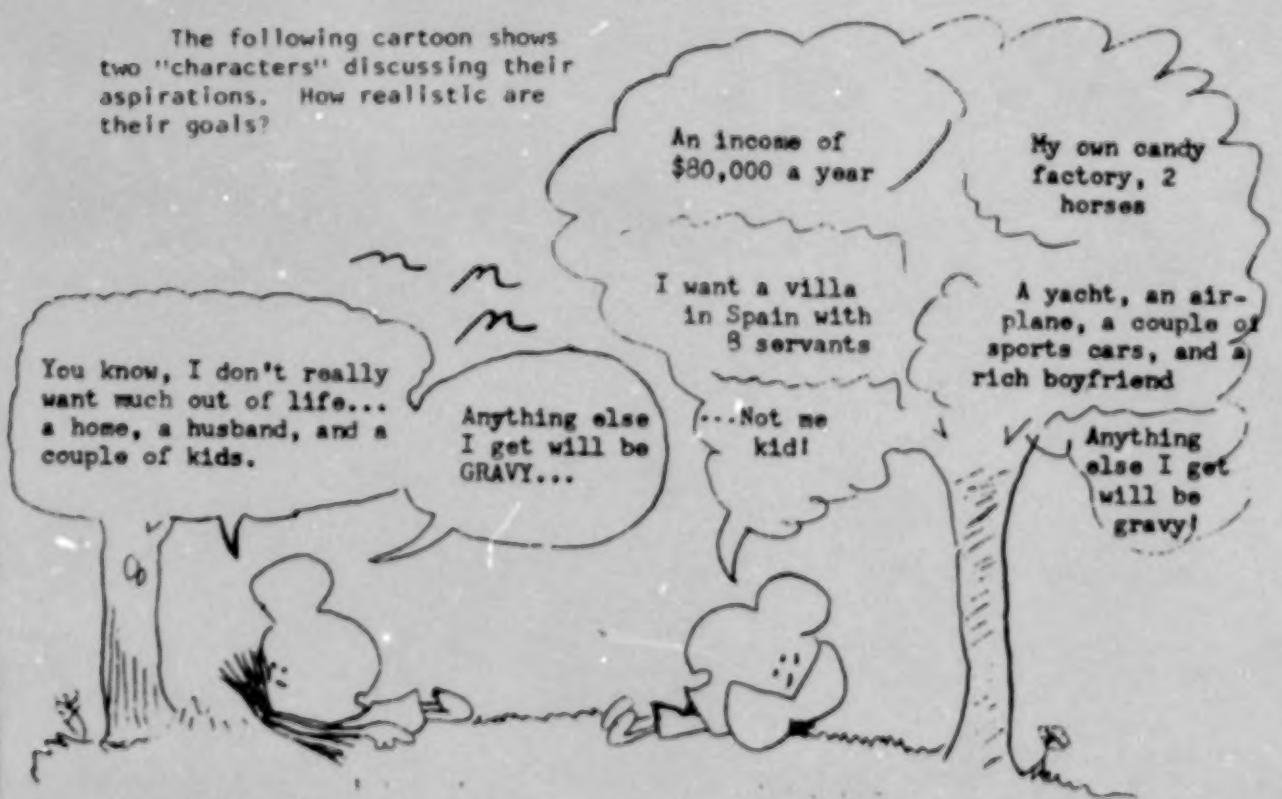
The following cartoon shows two "characters" discussing their aspirations. How realistic are their goals?


An income of $80,000 a year
My own candy factory, 2 horses
I want a villa in Spain with 8 servants
A yacht, an airplane, a couple of sports cars, and a rich boyfriend
You know, I don't really want much out of life... a home, a husband, and a couple of kids.
Anything else I get will be GRAVY...
...Not me kid!
Anything else I get will be gravy!

What are some of the factors that influence the goals we set? Here are some ideas; and you can add others:

-- Past achievements. (Experiences that were successful.)
-- Interests.
-- Abilities. (What kinds of abilities?)
-- Unique personal needs. (What are yours?)
-- Parent's attitudes. (Do parents in different social-economic classes have different expectations for their children?)
-- Peer pressure. (Standards set by friends and members of your age group. Your choice of friends may influence your aspiration level and plans for the future.)
-- Economic and social group you belong to.
--
--
--

Question: How might these factors change as you have more education and experience?

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An interesting quotation encourages us to: "Aim at the sun. You may not reach it, but your arrow will fly higher than if aimed at an object on a level with yourself." How high are your goals? How do you view your aspirations?

1-- Enthusiasm: do you have it?
2-- Are you satisfied with things as they are? If there are some changes that you feel are needed, do you have the energy to work toward change.
3-- Do your interests change as you explore and learn about new things? Do you learn more about yourself as well as others?
4-- Is it a real challenge to reach some goals and then go ahead and set new goals?
5-- Is life fun because of new and different experiences and accomplishments?

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What hopes and aspirations might you fulfill through a job? Here are some: List others, and think about how important each one is to you. Rank them (1, 2, 3,...) in order of importance TO YOU. ("I hope that my job will .....)

___ Permit me to be creative and original.
___ Let me use my special abilities and talents.
___ Permit me to be helpful to others.
___ Allow me to work with people rather than things.
___ Let me work with things rather than people.
___ Give me status and prestige.
___ Provide a chance to earn a good deal of money.
___ Give me a stable, secure future.
___
___

Studies have shown that people's aspirations can be raised by exposing them to new experiences which help broaden their values, motives, and attitudes. Can you give some examples of how this might be done? ("Upward Bound," one of the government's Economic Opportunity programs is aimed at raising the aspirations of disadvantaged youth.)

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We all find "stumbling blocks" and "closed doors" that make it harder for us to reach our goals. Success breeds success, but sometimes failure stimulates us to work harder. The following examples show that continued effort and action--not just ability alone--are required to achieve success.

☆☆Pierre and Marie Curie performed 5,677 experiments in the discovery of radium (a white metallic element used in the treatment of cancer).

☆☆James Watt worked twenty years on his steam engine.

☆☆It took George Stephenson fifteen years to perfect his railroad locomotive.

☆☆Noah Webster labored on his dictionary for thirty-six years.

☆☆William Harvey worked day and night for eight years on his discovery of how the blood circulates before he was ready to publish his findings.

☆☆Charles Goodyear endured unbelievable hardships for eleven years in order to perfect his rubber-making process.

☆☆Cyrus W. Field experienced one disheartening failure after another in his attempt to lay a telephone cable across the Atlantic. But he kept on and finally succeeded.

☆☆Thomas Edison reported that only one of his inventions came accidentally--the phonograph. Most of his inventions were the result of repeated experiments and everlasting trying. For example, Edison and his staff worked for ten years on the electric storage battery, making more than 10,000 experiments before the results looked encouraging.

The formula for success, we have been told, is "one part inspiration and nine parts perspiration." Do you agree, or disagree? Where does "aspiration" fit in?

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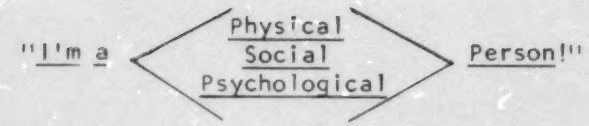
Today's Lesson in Brief

We've considered the importance of aspiration in achieving success, and noted some of the ways aspirations are formed and how they change. Perhaps you'll think about your own goals and how they might be achieved through the work you do.

EDUCATION and TRAINING to DEVELOP SKILLS

THE BRIDGE BETWEEN SCHOOL and WORK

Skills are the bridge between school and work. They are also the bridge between aspirations and achievement. Skills are the abilities that man uses to shape his future. We achieve little by just wanting or hoping. However, when aspiration is combined with skills and action, we increase our chances of achieving our goals.



Who are you, the person who becomes a worker? For purposes of career planning, let's look at you as the end product of your "biological-social-psychological" situation. By identifying the physical, social, and psychological parts of your makeup--and seeing how these develop over a period of time--you can gain some insights that will be valuable in choosing an occupation. For example, you can learn what particular characteristics you bring to the job and how a job may affect you.

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Some interesting theories and explanations have been made to explain the many sides of man, and they suggest the following conclusions:

1-- You have a PHYSICAL (biological) body which has characteristics inherited from your parents and ancestors on both sides of the family. And when these are mixed to form "you," it's unique--no carbon copies! Unique "you" then grows and develops with air, food, drink, and activity. These PHYSICAL characteristics include your health, strength, and manual dexterity.

2-- Your SOCIAL being is influenced by your surroundings and your experience with all the people with whom you come in contact. SOCIAL characteristics include communication skills, ability to get along with other people, poise and confidence.

3-- The PSYCHOLOGICAL "you," is influenced by your physical body and your social experiences so that you have your own personality, character, attitudes, values, and feelings. You set your own goals, and work toward them.

Question: Define in your own words your physical, social, and psychological characteristics. (What kinds of physical, social, and psychological "you's" are there?)

* * *

Not only does our physical development take time, as we grow from helpless infants to mature adults, but our psychological-social development also takes place over many years. Let's consider how and when we acquire our various psychological-social characteristics:

1--SENSE OF TRUST. This comes from receiving love and protection and having your needs met. (Example: Loving care from mother and dad.) Birth to 1 year.

2--SENSE OF AUTONOMY. The development of a person's basic individual personality pattern takes place. (Example: "I want to learn and do things for myself!") 1 to 4 years.

3--SENSE OF INITIATIVE. This is a period of vigorous testing of reality. (Example: Exploring! "Is it true? I must try it!") 4 to 5 years.

4--SENSE OF DUTY AND ACCOMPLISHMENT. Taking on real tasks and accomplishing them; failing to complete some. (And learning from mistakes, too.) 6 to 11 years.

5--SENSE OF IDENTITY. "Who am I?" A concept of "self" emerges. ("I am .... a strong and reliable boy," "I am .... a kind and friendly girl.") 12 to 15 years.

6--SENSE OF INTIMACY. This is the ability to establish close personal relationships with members of both sexes. (Friends, a marriage partner.) 15 years to adulthood.

7--PARENTAL SENSE. Creativity and interest in providing material things and security for one's children. (Being able to earn a good income from the job is important.) Adulthood.

8--SENSE OF INTEGRITY. You establish your own values and unique personality. You become able to accept your life and the people around you. You are "fulfilled" as a person in the sense that you develop as fully as you can your physical, psychological, and social capabilities. Adulthood.

Questions: Which stage of psychological-social development are you in now?
What problems do you find in this stage of your development?
How do you move to the next stages of your development?

People seem to develop and fulfill themselves best when they have purpose to their lives--by striving to accomplish something. Work helps to give us this sense of purpose. It helps man test his ideas and skills and provides a means for attaining many of his goals. With purposes and enthusiasm, he can face new challenges! (If we weren't constantly faced with new challenges, would life become boring?) It takes a long time to develop our various biological-psychological-social characteristics and skills? Thus, who we are changes daily, weekly, and yearly.

* * *

You have now analyzed the three separate parts (psychological, physical and social) of yourself as a person and how they develop. Now, let's put you back together again and consider you as a whole person. (This is one meaning of the term "personal integrity.") It is important to view you as a total person because when you are employed you bring to the job your whole personality--all your social, psychological, and physical characteristics.

You will probably want to be the "real you" on the job, just as you try to be the "real you" away from the job. However, you may have to do things on the job and put up with conditions that will make you unhappy and frustrated--and make you pretend to be somebody that you're really not.

The important question for you to consider is whether your job will help you develop your human capabilities as a person? What if .....

-- if you bring physical strength and vigorous energy to a job that requires you to sit at a desk all day. What effect will this have on your personality?

-- if you like to compete and be a leader but have to follow detailed instructions and conform to the demands of an assembly line. How will you react?

-- if the heat, foul air, and loud noises on the job really bother you. Should you spend half of your life--half of your waking hours--on a job that clashes with your personal characteristics?

-- if you don't have opportunities to talk to people on the job. How will this affect your personality away from the job?

Questions: List some specific types of physical, psychological, and social conditions of a job which you think would have good and bad effects on your work behavior? For example,

Good	Bad
-- Plenty of light (physical)	-- Very loud noise (physical)
-- A chance to work at your own speed (physical and psychological)	-- Supervisors who are constantly checking your work (psychological)
-- Friendly fellow workers (social)	-- Fellow workers who talk all the time (social)
--	--
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If you don't have a job that is in harmony with the TOTAL you, you're not likely to be happy or successful and may not even be healthy. If the job doesn't make enough demands on your talents you're just as likely to be unhappy as if the job requires more than you are capable of providing. What you need to ask of a job is: Are you getting the full rewards of work, or are you being short-changed?

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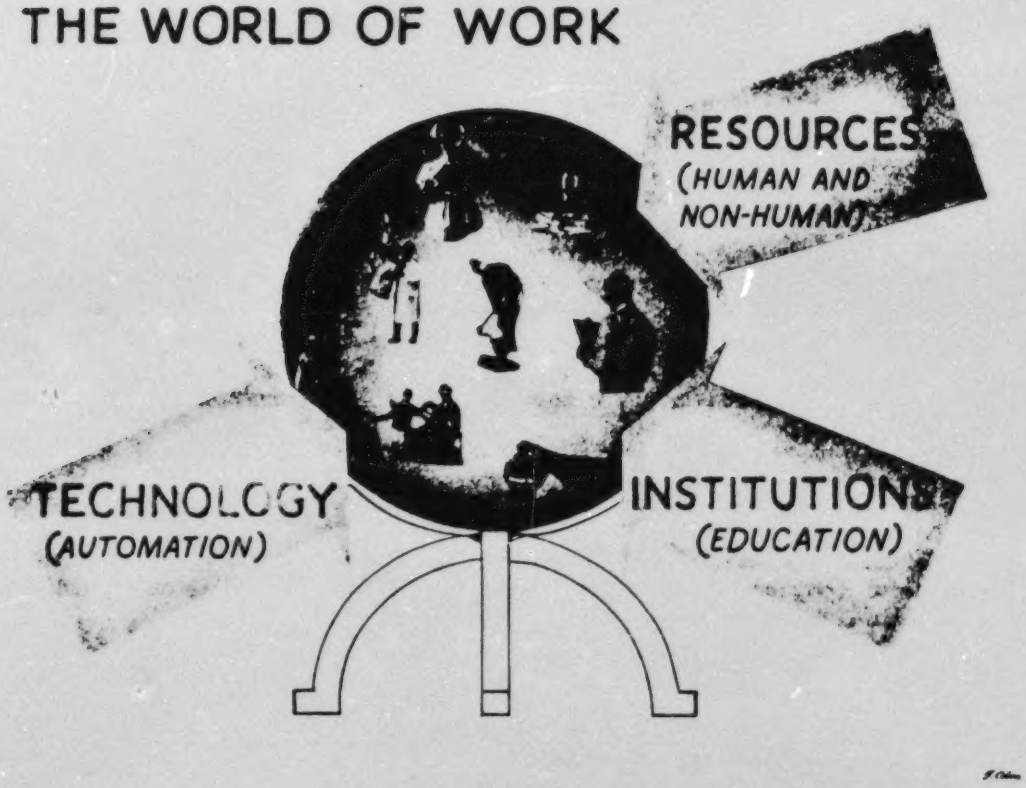
Today's Lesson in Brief

We have seen how man brings to his job what he has gained through his total life experience--his biological, psychological, and social development. Physical, social, and psychological factors continue to influence you both on and off the job. The way they affect you will not only determine the satisfaction or disappointment your job brings, but also the kind of person you are becoming.



These three forces influence what kind of person you are and will become. Automation is changing your world, and human resources are being improved through educational and other institutions to meet this challenge of technology. Our work force is using capital goods and natural resources to create a world which will offer opportunities for creative work to those who have the needed skills.

Man Is More Than A Means Of Production

"Man is not only the end, but also the means of production. Out of his dual capacity arises a conflict between his activities as a producer and his interests as a man--a clash between life and work."

-- Sumner Slichter

Man is constantly making "value judgments" about what is good and what is bad--in the work place and in the larger society. Conflicts of values arise within ourselves, with other individuals, with groups of people, and with institutions. These conflicts exist because we all have our own values, which differ somewhat from those of other people and the institutions of our society. As a young worker you will be faced with value conflicts. Only you can decide which values you will hold and how you will rank them. The satisfactions which you receive from work will be closely tied to your ability to resolve value conflicts that arise in the work place.

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What are the causes of the value conflicts that exist in the work place and society? In previous lessons we discussed the basic needs of man and difference in needs among individuals. For example, we learned that all men need nearly equal amounts of food and water, but the amount of "creative expression" that each person needs varies. This difference in needs among men may create value conflicts. We also have found that people can fulfill their needs in different ways. Because the different needs of man can be fulfilled in different ways (even the same need can be fulfilled in various ways) conflicts in values arise.

Question: Give some examples of conflicts in values which might exist because of the different needs of man.

* Here's an example involving the need for security and the need for personal integrity: In order to achieve my need for economic security, I may adopt the practice of "playing it safe"--not getting involved in anything controversial. "Playing it safe" (to achieve security) may clash with my value of standing-up for what I believe (personal integrity).

Conflicts in values also arise because we perform many different roles (often at the same time) during our lives. Men and women are many different things to many different people. Some of these roles are economic in nature--as worker-producer, consumer, citizen. Other roles are social--as husband, father, son, student, or wife, mother, sister, community volunteer worker, and housekeeper.

Questions: What are some of the other roles that men and women play? How do these roles lead to value conflicts? Give two specific examples illustrating value conflicts arising out of the roles we play.

* * *

Traditionally, our society has emphasized that the worker is important because he is a valuable "input" that produces goods and services. But can a worker fulfill his own needs as a man (or woman) if he is viewed by others as a physical means of production? A society which views work primarily in terms of output--how much is produced--is likely to create value conflicts because the worker is primarily concerned with work from the standpoint of "what's in it for him." He wants a pleasant and satisfying life doing interesting and rewarding things. He wants more than high wages. But what happens to the worker's nonmonetary needs if work is designed to maximize output rather than satisfy the needs of the worker? Conflicts of values occur!

* * *

Let's see what kinds of value conflicts a worker may face. Here are some examples:

-- Conflicts arising among individual workers in their interpersonal relations. Differences in attitudes about smoking cigars on the job may lead to conflict. (Phill refuses to stop smoking cigars in the office even though it makes Bob and the other office staff ill.)

-- Conflicts arise within the individual. What I have to do to be "successful" on the job may conflict with my other values. To get up the ladder of success, I may feel that I have to take advantage of my fellow workers while at the same time I am trying to be a practicing Christian. What I value as a husband and father, may clash with what I value as a worker. If I want to "get ahead" on my job, I may have to work long hours leaving very little time to spend with my family. A wife and mother who accepts employment may be torn between whether she should work (perhaps to satisfy her desire for expression and professional activity) or whether she should stay home and take care of her children. Are the children getting adequate care while she is gone? Does the income she earns contribute more to her family's well-being than would being a full-time mother and housewife?

-- Conflicts may appear between the individual and work group (people you work with) as a unit. Perhaps your co-workers believe in doing as little as they can get by with, but you may be a "go-getter." In this situation, what do you do? Please the "easy-going" group or please yourself? Have you ever heard of a person getting fired for being too efficient? Is this Impossible? Ridiculous? Read the true case of "Harry, the Go-Getter:"

> "Harry went to work as an auto mechanic in a downtown garage. After a few days, the boss told him that he liked his work and hoped that he would be working there a long time. However, when he went to get his first pay check, he was told

that he was fired! Why? His boss said that he was so energetic and ambitious that the old-timers around the garage looked awfully slow in comparison. Harry's energetic work routine made the other workers so nervous they complained to the boss. The boss told Harry that obviously he could not fire all the old-timers--so he had to fire Harry?"

-- Conflicts may also arise when the values of the individual worker are different from the values of the organization he works for. You may believe that "honesty is the best policy" and never consider cheating or being dishonest. The organization's values may be somewhat different from yours. Your employer directs you to falsify some office records in order to reduce the amount of tax that would be paid. Whose values will you follow--yours, or the organization's?

Questions: Give examples of value conflicts in the following situations:
-- between worker and the work group;
-- within the individual;
-- between workers;
-- between the worker and the organization.

When conflicts in values occur frequently, should we reexamine our values?

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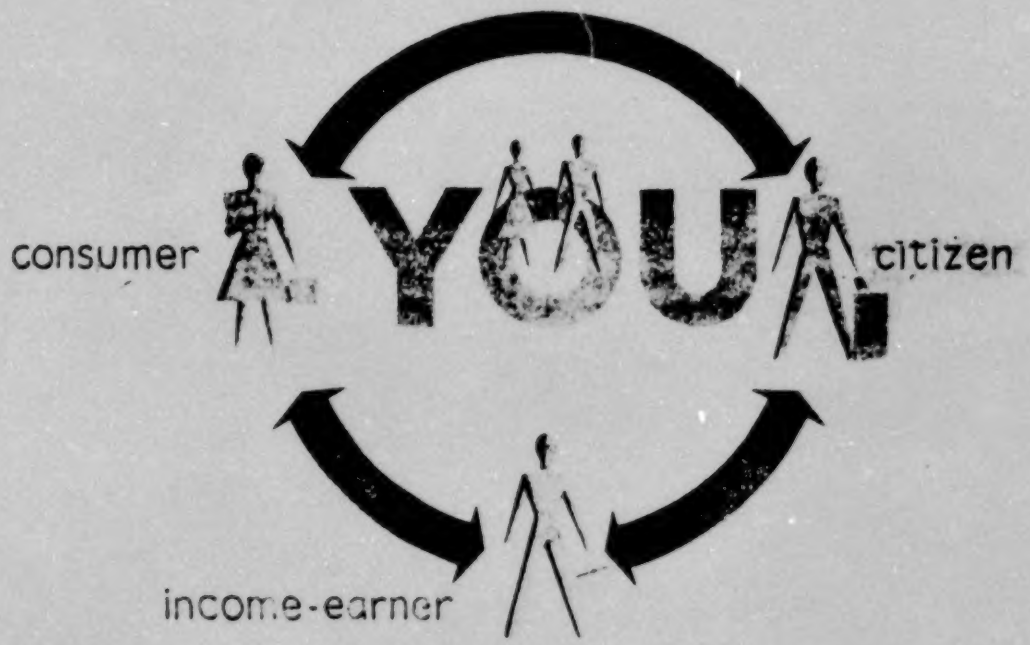
Today's Lesson in Brief

Values are ideas about what is good and bad, right and wrong. Value conflicts arise in the work place. These conflicts appear because individuals have different needs and different ways of fulfilling needs, and also because they have many roles to perform in their lives. Value conflicts can arise within ourselves, between and among individual workers, between the work group and the individual, and between the worker and the organization. Each worker must decide for himself what values he wishes to hold and what costs he is willing to bear for choosing certain values. In the world of values, as in the world of economics, "there is no such thing as a free lunch."

ROLES IN ECONOMIC LIFE



Conflicts of values may arise as we perform our three different economic roles. For example, we may want more income to spend for consumer goods but prefer to work fewer hours, which would mean less earnings. Value conflicts also occur between our economic and our noneconomic roles. The job that would bring us the highest income may not give us the social status we desire.

What Price Success?

"If a man does not keep pace with his companions,
perhaps it is because he hears a different drum."

-- Henry Thoreau

Most Americans seem to believe that Success is a very important goal that's well worth striving for. In this lesson we'll examine "success" by asking a number of questions about it" What is success? (-- money? power? social status? something entirely different?) How is it achieved? What is the price that some people pay to achieve success? The answers you give to these questions may help you establish your own goals and values in life and also aid you in understanding the behavior of other people.

* * * * * * * * *

Success is a goal that is sought by almost all Americans. It has been called "the Great American Dream." But what is success? Here are some comments that people have made about success:

"The ambition to succeed is the ambition of every parent for his child. It is strictly an American ambition; at once the national vice and the national virtue. It is the mainspring of activity, the driving wheel of industry; the spur to intellectual and moral progress. It gives the individual energy; the nation push. It makes us at once active and restless; industrious and overworked; generous and greedy. When it is great, it is a virtue; when it is petty, it is a vice."

"Politicians equate success with power, public relations men with fame. Teachers and moralists rate themselves successful when they have influenced the minds and characters of others. Men of creative instinct strive for self-realization. Humanitarians identify success with service, reformers with bringing about changes in society. To the religious, success is salvation, and to thousands of ordinary people, it is nothing more than contentment and a sense of happiness. Each of these definitions shows worthy ideals, but no one of these concepts enjoys such universal favor in America as that which equates success with making money."

"Success in life means to a person that he has found his own significance in life--found what is important to him."

* * *

Question: How would you define success? What values and specific goals are implied by your definition? (Hint: See examples underlined in the paragraph above.)

* * *

Now let's consider how money and success are linked together in the minds of Americans. The traditional heroes of America--such as Thomas Edison, Andrew Carnegie, Henry Ford, David Sarnoff--are successful self-made men. America's heroes have been active in every field from politics to the arts, but nowhere have they achieved more rewards and fame than in business. To many Americans, their hero is the office boy who has become the head of a great business firm, making millions of dollars in the process. He represents a very popular idea of success--the living example of our belief that any man can achieve fortune through hard work and wise use of his money.

The importance we attach to money in our life can be demonstrated by quoting some of the ideas and attitudes many Americans hold: "Money talks." "If you're so darn smart, why aren't you rich?" "Money isn't everything, but it's way ahead of whatever is in second place." "That man is sound as a dollar." "You can't live on good will." "Never lend money to a friend." "Money isn't everything, but it helps." "Money may not buy happiness, but it sure prevents a lot of misery."

Questions: What role does money play in <u>your</u> definition of success? What are some of the ways that "money-getting" affects the lives of Americans? Can you give some specific examples of how money is used as a standard for valuing noneconomic behavior in our society? (For example, "That man's word isn't worth a plug nickel.")

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Is it true, as some psychologists and sociologists have charged, that to be a success you have to "market" or sell yourself--to shape your identity in order to become "a package" that is demanded in the manpower market? Should life be a "nightmare" in which men and women do not live as they wish, but instead are just playing roles? In a "rat race" to achieve financial success and its status, prestige, and power, do we lose sight of what is really important to each of us?

Franz Alexander, a psychologist-philosopher, thinks we <u>do</u> get caught up in a rat race and lose sight of what is important to use. He says that:

> "...physicians, lawyers, engineers, bankers, advertising men, teachers, and laboratory research men of universities, students, and clerks--engaged in a marathon race, their eager faces distorted by strain, their eyes focused not upon their goal, but upon each other with a mixture of hate, envy, and admiration. Panting and perspiring, they run and never arrive. They would all like to stop but dare not as long as the others are running.
>
> "What makes them run so frantically, as though they were driven by the threatening swish of an invisible whip wielded by an invisible slave driver? The driver and the whip they carry in their own minds. If one of them finally stops and begins leisurely to whistle a tune or watch a passing cloud or picks up a stone and with childish curiosity turns it around in his hand, they all look upon him at first with astonishment and then

with contempt and disgust. They call him names, a dreamer or a parasite, and others. They not only do not understand him--they not only despise him but 'they hate him as their own sin.'

"All of them would like to stop--ask each other questions, sit down to chat about 'small things'--they all would like to belong to each other because they feel desperately alone, chasing on in a never-ending chase. They do not dare to stop until the rest stop lest they lose their self respect, but they know only one value--that of running--running for its own sake."

Question : Do you agree that some workers "market" themselves in the sense described above? Do they engage in a "rat race" in the manpower market? What evidence do you have to support your view? What is good or bad about "marketing" yourself and running a "rat race?"

* * *

What have we learned about success? Most Americans think of success as a good and worthy goal. Status, prestige, and power are the rewards we give the successful--especially those who are financially successful. Though we tend to identify success with making money, there are other valid definitions of success. Our concern with financial success

"This makes it all worthwhile. It's what makes America great!"

may affect many areas of our lives. Money may become a measuring stick by which we judge and evaluate the worth of a man and many aspects of our lives. In our hot pursuit of success, we may lose sight of some of the more important things in life and become a different type of person than we really intended. But, if--recalling the opening quote from Henry Thoreau--we do march to the beat of "a different drum," we will doubtless find once again that "there is no such thing as a free lunch." The cost of following your own values includes not only financial sacrifice but also a certain loneliness that goes with not keeping pace with your companions.

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Many Americans might be upset by some of the ideas that social scientists have on money-getting, success, and the roles that people play in our society. In today's lesson, we ask serious questions about some of the traditional goals and values of the American people. Whether you personally accept these values, or find yourself more in agreement with the views of some of the critics, these <u>are</u> the kinds of questions that young Americans in an open society should be asking themselves.

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<u>Today's Lesson in Brief</u>

Although success can mean different things, many Americans identify it with money and material possessions. This concern with financial success influences the way we look at man and his world. In America, each individual is free to decide for himself what his goals and values will be. The way you define success may have an all-important effect on your life.

SKILLS AND THE ECONOMIC VALUE OF EDUCATION

Will It Take A Good Education To Get Tomorrow's Jobs?

The men and women in our labor force increasingly are better educated. Today, the average (median) worker in our economy is a high school graduate. The increase that has been taking place in the years of schooling completed by our labor force will continue. Employment experts have suggested that "to enter the job market without at least a high school diploma is now economic suicide."

* * * * * * * * * *

You can answer the question of whether it will take a good education to get tomorrow's jobs by using some of the tools of economic analysis you learned about earlier. You will recall when we talked about supply and demand in the manpower market that the education of workers was one of the factors affecting the supply of workers. And "manpower requirements"--the need for people with certain skills--was one of the factors affecting the demand for workers. Therefore, if we look at both the supply of and demand for workers in the manpower market, we should be able to give an answer to the question posed at the beginning of the lesson.

In our introduction to the manpower market, we noted that the labor force was the "pool" or supply from which employers could draw workers. Let's look at Table I on the next page to see the amount of schooling that the labor force has now and is likely to have in the future (in 1980). You can see, for example, that the number of high school graduates in the civilian labor force increased during the period 1964 to 1970, and the number of college graduates also increased during the same period.

Table 1. YEARS OF SCHOOL COMPLETED BY CIVILIAN LABOR FORCE 18 YEARS AND OVER

Years of School Completed	March 1964	March 1970	Projected* 1980
ELEMENTARY:			
Less than 5 years	3.7%	2.4%	1.8%
5 to 8 years	20.9%	15.1%	10.1%
HIGH SCHOOL:			
1 to 3 years	19.2%	17.3%	16.8%
4 years	34.5%	39.0%	42.4%
COLLEGE:			
1 to 3 years	10.6%	13.3%	12.0%
4 years or more	11.2%	12.9%	16.9%
TOTAL LABOR FORCE	100.0%	100.0%	100.0%
TOTAL:			
Less than 4 years of high school	43.8%	34.8%	28.7%
4 years high school or more	56.3%	65.2%	71.3%

*Men and women 25 years and over. NOTE: of all the people in the labor force in 1964, 3.7% had less than five years of schooling; 34.5% had finished 4 years of high school; etc.
SOURCE: MANPOWER REPORT OF THE PRESIDENT 1971, p. 203 & 260.

Look at the statistics in Table 1 and then answer the following questions:

1-1. In your opinion, do we have a well-educated group of workers in today's economy? Yes _____ No _____.

1-2. How would you rate the level of schooling completed by your potential rivals for the jobs of 1975?
Good _____ Fair _____ Poor _____.

1-3. What conclusion do you draw from the figure 71.3%, which is boxed?

1-4. Will post-high school training become more popular, or less?
More _____ Less _____.

* * *

We have looked at the education of the potential supply of workers for 1975. Now let's turn to the demand for workers during the decade of 1965-1975. By examining the amount of schooling that different occupational groups have today, and the relative increase in demand for workers in these occupations, we can gain some insight into the relationship between education and employment opportunities. Table II shows the relationship between schooling and growth in employment opportunities.

Table ii. YEARS OF SCHOOLING AND ANTICIPATED GROWTH IN EMPLOYMENT

Occupational Group	Average Number of Years of Schooling Completed in 1965*	Rank by Number of Years of Schooling Completed	Rank by Percentage Increase in Projected Employment 1965-1975
Professional & technical	16.3	1	1
Managers, officials, and owners	12.6	2	4
Clerical Workers	12.5	3-4	3
Sales Workers	12.5	3-4	6
Craftsmen & foremen (Skilled)	11.7	5	5
Operatives (Semiskilled)	10.6	6	7
Service workers	10.1	7	2
Laborers (Unskilled)	9.5	8	8
Farmers & farm workers	8.6	9	9

*Average here is the median, which is the middle number in a distribution of numbers ranging from the highest to the lowest. Half the people have more than the median number of years of schooling and half the people have less.

SOURCE: D. Johnston & H. Hamel, "Educational Attainment of Workers In March 1965," Special Labor Force Report No. 65, U. S. Department of Labor, Bureau of Labor Statistics, pp. 4-13, U. S. President & U. S. Department of Labor, Manpower Report of the President 1967, p. 274.

Questions from Table II:

II-1. Does this table suggest to you that the occupations which are growing the fastest in employment opportunities are the same ones that require the most education? Yes _____ No _____.

II-2. How do you explain the high increase of jobs for service workers, even though they rank among the lowest in average years of schooling completed?

II-3. What does this table not tell you about employment opportunities in 1965-1975?

We can gain some insight into the relationship between education and employment by looking at what happens to men and women in our labor force who do not have the same "credentials" (a high school diploma) as the majority of American workers. Table III shows the employment situation faced by high school dropouts and compares it with high school graduates. The statistics show, for example, that 28.2% of high school graduates are white-collar workers, while only 11.4% of the dropouts have white-collar jobs.

Table III. OCCUPATIONAL EMPLOYMENT OF HIGH SCHOOL GRADUATES AND DROPOUTS IN 1965*

Occupational Group	Dropouts	Graduates
WHITE-COLLAR WORKERS:	11.4%	28.2%
Professional, technical, managers, officials, and owners	3.9	9.8
Clerical	4.5	13.5
Sales	3.0	4.9
BLUE-COLLAR WORKERS	74.2%	59.3%
Craftsmen and foremen	23.2	20.0
Operatives	34.0	28.9
Laborers	17.0	10.4
SERVICE WORKERS	6.8%	6.2%
FARMERS & FARM WORKERS	7.7%	6.4%
ALL WORKERS	100.0%	100.0%

NOTE: Because of rounding, sums of individual items may not equal totals.

*Based on sample of 2.4 million men ages 16-21. The term "dropout" refers to men who left school before graduating from high school; the term "graduates" refers to men who graduated from high school, and includes men who had spent time in college but were not college graduates.
SOURCE: V. Perella, "What Happens to School Dropouts?" Occupational Outlook Quarterly, February 1967, p. 7.

Questions from Table III:

III-1. What is the penalty in terms of employment, that the dropouts pay for not graduating from high school?

III-2. Is it true that "to enter the job market without at least a high school diploma is now economic suicide?"

You have seen that over 60% of the men and women in the labor force in 1975 will be high school graduates. These are the people you will be competing against for jobs. It has also been shown that the jobs that are growing fastest are generally those requiring the most education. The relative demand for workers for tomorrow's jobs in almost every case will be greatest for those occupations where high school graduation is already the norm.

To drop out of school before you complete high school is to limit seriously your employment opportunities. The facts on dropouts show that the chances of being employed in professional, technical, or managerial jobs are two and a half times as great for high school graduates as for dropouts. Only about one out of every nine dropouts is a white-collar worker while better than one out of every four high school graduates is employed in white-collar work.

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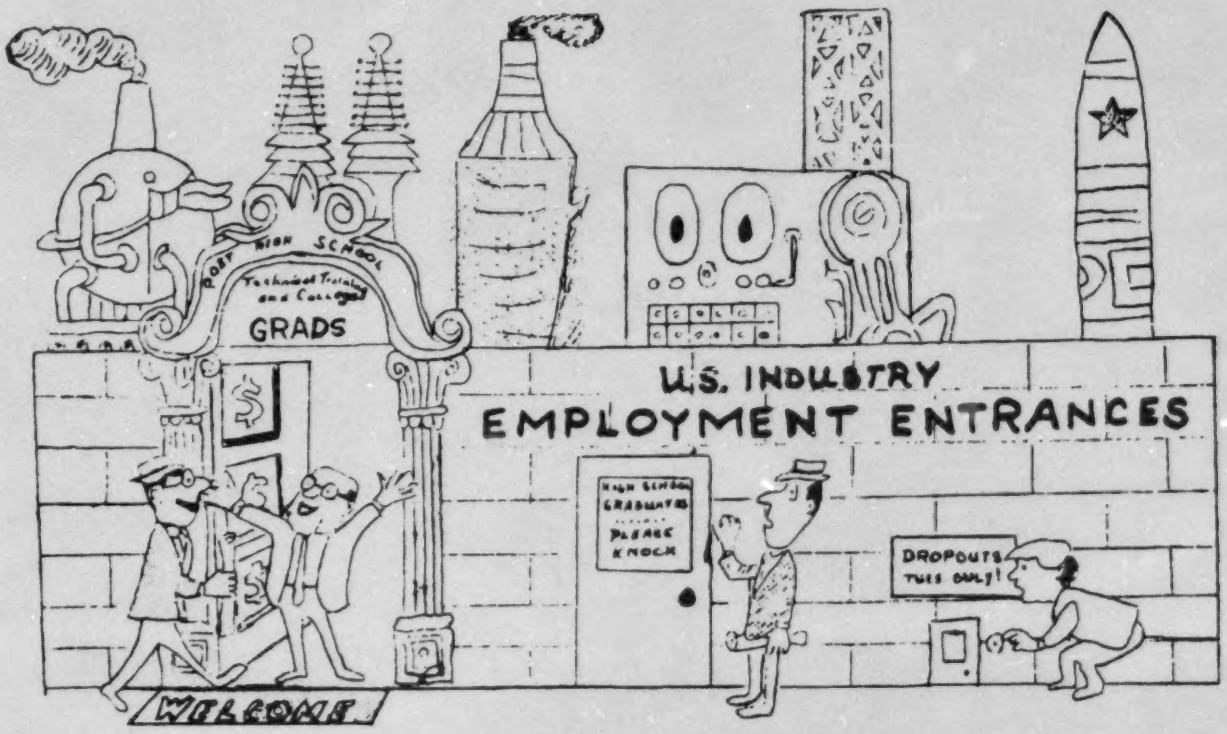

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Today's Lesson in Brief

Data have been presented showing that American workers have a great deal of schooling and that the amount of education that they will have in the future is even greater. While it may not be exactly "economic suicide" to enter the manpower market without a high school diploma--it is a serious handicap. It will take at least a high school diploma to get most of tomorrow's jobs.

THE ECONOMIC VALUE OF EDUCATION

higher standard of living

economic growth

The economic value of your education--both to yourself and society--will depend upon whether you are employed and what type of job you have. The amount and type of your education will largely determine your qualifications for employment.

Skills for Your Skill Bank

"Education must provide, as a basic part of its human development responsibility, the preparation needed for effective participation in our economic life."

--Manpower Report of the President, 1964

In order to participate successfully in the economic life of our society, as a worker and income-earner, you will need to have skills--the ability to use knowledge effectively. One of the most important facts of American economic life in the second half of the 20th century is that you "can't get tomorrow's jobs with yesterday's skills." New kinds of skills are needed in our constantly changing Human Resources Economy. These skills are acquired or developed through education, training, and work experience.

* * * * * * * * * *

"Skill" is the ability to use knowledge effectively. Skill is technical proficiency. Skill is knowing how to get the job done and being able to actually do it.

Manpower skills are the most valuable resource that an economy can have. As we pointed out earlier in the course (lesson #21, The Knowledge Explosion), the application of scientific and technical knowledge to the production of capital goods (such as machinery, buildings, equipment) and consumer goods and services (such as cars, TV sets, food, clothing) is the most important factor in the development of our "economy of abundance." Men and women--workers, human resources--are the factors of production that apply knowledge to get the job done. You will recall that this is the most important difference between the advanced economies (including the U. S., Britain, the Soviet Union, Japan, etc.) and the underdeveloped economies of Asia, Africa, and Latin America. The richer countries have a more advanced technology spread throughout the economy, along with a vast supply of highly-skilled manpower, while the less developed countries are lacking in skilled manpower and modern technology.

Manpower skills certainly are important to the economy as a whole, and a major cause of economic growth. How important are manpower skills to individual members of our econmic society?

Of course, you already know the answer: skills are extremely important. Workers with the highest skills generally qualify for the best-paying jobs. Workers without job skills not only get low wages, but often

they can't even find a job. In 1971, the unemployment rate for Professional and Technical workers stood at 2.9%. For Unskilled Laborers (nonfarm) the unemployment rate was 10.8%. In other words, the unemployment rate was almost five times as high for unskilled laborers than for the highly-skilled professional and technical workers. In 1969 the median income for persons completing elementary school (Grades 1-8) was $6,769 per year while the median income for persons completing four or more years of college was $14,685 per year, showing that on a lifetime basis the earnings for college graduates would be more than double the earnings of workers having only eight years of schooling. The skills acquired from college training help these graduates to earn, on the average, an extra $648 a month above the earnings of male workers having only eight years of schooling.

Education, training, and skills will continue to bring bigger "pay-offs" in the human resources economy of the future. We'll study these personal economic rewards further in future lessons.

* * *

Acquiring skills is like putting money in the bank. As you develop more and better skills, you increase your employability and your earning power. Just as a healthy bank account makes you (and your family) feel more secure, a healthy "skill bank" makes a worker feel more confident and secure in terms of the role he can play in our economic life. (Putting the skills to work for you involves something more, of course. You must learn where the opportunities exist in the manpower market and be willing and able to adjust to the demands of employers. This may require you to move to a different community and perhaps even adopt a somewhat different way of life.)

Let's identify some basic skills that are valued in the manpower market, and study the characteristics of these valuable manpower skills.

Years ago, our economy was built on muscle power; today our modern economy is built on brainpower. The four types of skills needed for today's jobs and tomorrow's jobs are:

** Communication (using WORDS--both written and oral--effectively)

** Computation (using NUMBERS effectively)

** Manual Dexterity (using your HANDS effectively)

** Group Organization (working effectively with other PEOPLE)

Let's examine each of these skills more closely.

* * *

Because our economy is becoming more and more specialized and

interdependent, we rely increasingly on communications to get our work done. Books, pamphlets, training manuals, reports, instruction sheets, business forms--the printed page--tell us what work to do and how to do it. Instructors and on-the-job supervisors use the spoken word to explain how a job is done (a teacher must be able to communicate effectively in order to teach successfully). We read newspaper ads to inform us of job opportunities (and somebody writes these ads). Application forms, with instructions "in small print," must be filled out when applying for a job. Reports must be written, distributed, and read in order to keep managers and officials informed of what's going on.

Today, more than ever before, the American worker is required to read, speak, and write effectively in order to get a job and perform it successfully.

A second important skill is Computation, or Calculation--being able to work with numbers quickly and accurately. A worker who can copy numbers quickly and accurately for record-keeping purposes, perform simple operations such as adding and multiplying, and "make change" accurately at the cash register has skills that are very much in demand by today's employers. Mistakes due to carelessness or inability to "process data" can be costly for a business firm--and sometimes can even cost the inept worker his job.

The third basic skill is Manual Dexterity, which is the ability to work effectively with your hands. ("Manus" is Latin for "hand;" manual work, manipulate, handling things--all these terms imply working with your hands.) The ability to use tools, operate office equipment, wrap packages, assemble parts of a machine, stamp invoices, and do similar jobs is extremely important in the production process. It isn't enough to know how a job is done. What counts is being able to actually do the job. (The president of the company may know how a piece of electronic equipment is supposed to be assembled; but he may lack the manual dexterity, or "motor skills" required to actually perform the work.)

Finally, the fourth basic skill needed in our modern economy is Group Organization. This is especially important in service-producing industries--the sector of our economy that is expanding most rapidly--because it involves interpersonal relations and the ability to work effectively with other people. Today, few people in our economy work alone, as individual producers. For the most part, we work in groups. Social skills are required to work effectively with other people, and to perform your own job in such a way that it contributes smoothly and efficiently to the over-all task at hand.

Questions: Which one of the four basic skills is most important in our modern economy? Which skill is hardest to develop? What basic manpower skills are most likely to command the highest rewards in the 1970's and beyond?

* * *

Let's review what we have learned about the basis "CCMG manpower skills" by seeing how they apply in the following case studies:

#1) Betty Murphy, who has never worked for a mail-order company before decides to fill out an application form (requiring her to read the instructions and write the proper information). Then comes a personal interview, in which she listens to a personnel assistant explain the job requirements and then demonstrates her own oral communication skills by answering questions and discussing her qualifications for the job. Because she can read descriptions in a catalogue, is good with numbers, and can speak clearly and distinctly, she is hired as a telephone order clerk and becomes a valued employee. Eventually she may be promoted to supervisor.

#2) Kitty Harrison applies for work as an assembler in a local factory specializing in transistor radios and electronic equipment. She can't quite figure out what "they mean" on the application form, and she leaves several items blank. Her handwriting is messy, and she spells seven words incorrectly on a single page. The company representative who interviews Kitty is "impressed" with her long, pointed fingernails and the two buttons that are missing from her jacket. Kitty says she doesn't enjoy working with people, is a "slow reader," didn't do very well in arithmetic in school, and doesn't like to "take orders from anybody." Question: If you were the interviewer, would you recommend that Kitty be hired? Why or why not?

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The four kinds of manpower skills we have identified as being of greatest importance for tomorrow's workers--Communication, Computation, Manual Dexterity, and Group Organization--are not exactly "revolutionary." We are all familiar with the three R's--Reading, 'Riting, and 'Rithmetic; and vocational education programs have always stressed Manual Dexterity (under the heading of "skill training"). But in the future, Reading and Writing (communication skills) will be more important than ever. Arithmetic (computational skills) will continue to grow in importance. Some of the older Manual Training skills have become outdated, though others continue to be extremely valuable. Group Organization (and personal relations skills) gain importance in our highly organized society.

What is important about the "CCMG skills" for the "manpower revolution" of the second half of the 20th century is that they all must be open-ended. These four skills are important because they are basic, they are durable, are transferable (to new and different jobs), and they are versatile (can be used in acquiring new and different specific job skills in the future. (NOTE: manpower experts say that the average young worker today can expect to change occupations three or four times, or more, during his lifetime.) The young man and young woman--in school or on the job--who can build up a solid "skill bank" today will be able to draw on these basic skills for the rest of his or her working life. Through continuing education and training, these workers will be able to keep up with changing manpower requirements year in and year out. On the other hand, the worker who fails to build a solid base of manpower skills and acquires only a limited, narrow, specific job skill, will face insecurity and high risks of unemployment and low earnings for the rest of his working life.

Questions

1. How can you acquire the four basic manpower skills described in the lesson?

2. In what sense is the ability to get along well with other people a "manpower skill?"

3. How can Communication skills acquired in school help a worker acquire additional occupational skills after he leaves high school?

4. What are some specific activities, outside of school work, that can contribute to building your own personal "skill bank?"

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Today's Lesson in Brief

In order to participate effectively in econmic life, a worker must have manpower skills--the ability to use knowledge effectively on the job. Skills that are basic, durable, versatile, transferable, and open-ended will prove most valuable for a worker's personal "skill bank." Four basic manpower skills identified in this lesson are:

Communication

Computation

Manual Dexterity

Group Organization

☆ ☆ ☆

"The individual does not have ar education unless he has occupational skills."

-- Grant Venn (In American Vocational Journal)

THE ECONOMIC VALUE OF EDUCATION

higher standard of living

economic growth

Skills are the means of getting and keeping a job. They make it possible for us to be more productive workers. This higher productivity creates additional goods and services that can provide workers with a higher standard of living while promoting the economic growth of society.

How Can I Get the Skills Needed for Tomorrow's Jobs?

Most of tomorrow's jobs will require more skills and different skills than jobs required in the past. In order to acquire the needed skills, men and women can enroll in a variety of different training programs available in many areas of the country. A knowledge of these educational opportunities will be valuable to you in preparing for your entry into the manpower market of the 1970's.

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Before we examine the educational and training programs available to provide you with occupational skills, let's see where the men and women in today's labor force actually got their formal job training. Workers have acquired formal job training in many different types of schools and training programs. Table I shows the source of formal training for adult workers having such training as of April 1963. The table indicates, for example, that one out of every nine workers (11%) who had received formal job training got his training in the Armed Forces. Of all the women workers having formal job training, 28% received their training in Special Schools such as business, nursing, and beauty schools.

Table I. SOURCES OF FORMAL TRAINING PROGRAMS TAKEN BY WORKERS*

Source of Training	Total (percent)	Men (percent)	Women (percent)
High School	38%	30%	55%
Special School (business, nursing, beauty, etc.)	19	15	28
Armed Forces	11	16	1
Apprenticeship	8	12	1
Company School	7	7	5
Correspondence Courses	6	8	2
Technical Institute	6	8	2
Junior College	5	4	6
TOTAL ALL SOURCES	100%	100%	100%

*Includes all workers in the civilian labor force 22-64 years of age, have less than three years of college; data for April, 1963.

SOURCE: U. S. Department of Labor, Office of Manpower, Automation, and Training, Formal Occupational Training of Adult Workers, December 1964 in S. Wolfbein, Education and Training for Full Employment, 1967, p. 71.

Questions from Table I:

1. Company Schools operated by American business firms provided most of the formal job training that their employees had as of 1963. (Please check the correct answer.) True_____ False_____.
2. What percentage of workers had received their training from technical institutes?
3. What was the source of training for over half of the women workers?
4. What three training sources together accounted for two-thirds of all training received by workers?
5. Why do you suppose so few women are trained by apprenticeship programs?

• • •

Let's begin our examination of available training programs by looking at the ones offered in the public High Schools. Over half of our high schools throughout the nation offer vocational programs for their regular day students and also for employed and unemployed out-of-school youth and adults. (Six million people are enrolled in these programs -- half of them are adults). Vocational education programs are designed to train both men and women for useful employment in skilled trades and industry, agriculture, home economics, office occupations, and retail trade. These vocational courses prepare students for such occupations as automobile mechanic, apprentice carpenter, farmer, practical nurse, salesman, secretary, and machine operator.

In Ohio there are more than 200,000 people enrolled in vocational education programs. (Two-thirds of these students are adults). More high school students in Ohio are enrolled in the clerical office practices program (typing, filing, using office equipment), than all the other vocational programs combined. Some students who are enrolled in a general or college preparatory program arrange to include individual vocational courses in their studies in order to gain occupational skills. Many high schools now include work experience or "cooperative" programs in their curriculum. These programs are usually a part of the vocational curriculum of the school and combine study in the classroom with work experience on a job. The general purpose of these work experience programs is to prepare students for useful employment in occupations while they are completing their high school education.

• • •

About 14% of the workers in our civilian labor force received their formal occupational training by attending a college or university for three or more years. There are many different types of programs in the colleges and universities that will provide many CCMG skills (especially Communications, Computation, and Group Organization) needed for employment in professional and other types of occupations. Junior Colleges -- two year colleges -- also offer many types of programs which provide the means of learning a variety of job-related skills. For example, some junior or

"community" colleges offer programs in computer programming, nursing, and automotive and aircraft mechanics.

* * *

Special Schools and Technical Institutes -- both public and private -- offer a wide variety of programs for preparing for technical, office, industrial, and personal-service occupations.

Questions. What types of vocational education programs does your high school offer? For what occupations can the vocational education programs in your high school help prepare you? What public or private technical, business, and trade schools are there in your community?

* * *

In the remaining three types of training programs we are going to discuss, the worker gets his training while on the job. This form of training involves learning a job by actually practicing the skills needed to perform the work. It is the oldest type of program for learning occupational skills. Craftsmen and tradesmen have been recruited and trained on the job since the dawn of history. The men who shaped and laid stone for the pyramids in Egypt, who wove silk in northern Italy during the Renaissance, who built ships on the River Clyde in Scotland in the 18th century, or who printed copy for Benjamin Franklin in Philadelphia were selected and trained at the workplace for their highly skilled work. Training and manpower experts estimate that in the past about 60% of our workers just "picked-up" the skills (either on the job or off the job, without formal training) needed to do their current jobs.

Formal on-the-job training (OJT) is provided by many employers in cooperation with the U. S. Department of Labor. Most OJT in American industry is sponsored by private business firms, but OJT training is supported by the Manpower Development and Training Act (MDTA). This act creates training programs that are a partnership between cooperating employers and the federal government. In 1966, MDTA authorized OJT for about 95,000 workers (three out of four were men). Two-thirds of these OJT trainees were being prepared for skilled or semiskilled blue-collar occupations.

The MDTA also finances other training programs aimed primarily at unemployed persons who do not have the skills needed to get today's jobs. These programs are operated by public or private training institutions with supervision from the vocational education agencies of the state government. In the first four years of these programs -- 1962 through 1966 -- over 265,000 workers had completed their training. Men received training in such occupations as automotive mechanic, baker's apprentice, printing type-setter, and electrical appliance serviceman. Women -- who make up 40% of trainees -- were being prepared to work in such occupations as key-punch operator, psychiatric aide, receptionist, and X-ray technician.

* * *

Questions: Please check the correct answer.

1. Occupational training on the job has almost died out in the United States. True_____ False_____.

2. The Manpower Development and Training Act supports two different types of training programs: OJT and Institutional. True_____ False_____.

* * *

Apprenticeship programs are available for young men and women to learn the skills they need for specific occupations such as cosmetologist, book binder, dental technician, plumber, carpenter, and tool and die maker. What are apprenticeship programs? They are formalized on-the-job training for learning skilled crafts, usually sponsored by labor unions, employers, and the federal, state, and local governments. (About 8,000 workers in Ohio and 260,000 in the nation are in apprenticeship programs.) You can learn approximately 350 different skilled trades through apprenticeships. Most of these trades are in the construction, printing, and metal-working industries. The training of an apprentice involves learning skills on the job, learning a wide range of skills over a period of two years or more, training under a written agreement with an employer and usually a labor union, and going to job-related classes at a school. Requirements for apprenticeship training vary among states and occupations. The basic qualification for this type of training is that the apprentice be capable of learning the skills necessary to become a journeyman (for example, to become a journeyman carpenter, plumber, electrician). Question: What types of apprenticeship training are available in your community?

* * *

The programs we have described above reflect a growing concern in our nation with the "manpower revolution" taking place in our economy and the need for workers to develop new and better skills. These skills are necessary to perform the jobs being created by the process of technological change and economic growth. In response to these manpower needs, the federal government passed the Manpower Development and Training Act in 1962. This was the start of a new "national manpower policy" designed to increase the investment in human resources and develop the occupational skills needed for the economy of the 1970's and beyond.

* * * * * * * * * *

Today's Lesson in Brief

There are many different educational and training programs available to help you learn the skills needed for tomorrow's jobs. Vocational education programs -- some of which involve actual work experience -- are available in many high schools. Colleges, universities, junior colleges, and public and private technical, business, and trade schools offer many different programs for learning work-related skills. On-the-job training is provided by many employers. The federal and state governments sponsor MDTA training programs. Apprentice programs are also available to learn skilled trades. Regardless of what occupation you are interested in, there usually will be a variety of different education and training programs you can enroll in to obtain the skills needed to qualify for employment.

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Education's Payoff

"Let ignorance talk as it will, Learning has its value."

-- La Fontaine

Investments made in human resources result in benefits or "payoffs" that can be measured in dollar amounts. Education is one of the most important forms of investment in people. The cash value of a complete high school education is almost $1,000 a year greater than the value of a high school drop-out's education. A college education on the average pays off at the rate of $3,000 per year in extra earnings above what a high school graduate receives.

* * * * * * * * * *

In earlier lessons we saw how education (along with healthful food and housing, medical care, etc.) could be considered an "investment in human resources" -- the use of manpower, capital, and natural resources to help men and women improve their productive capacity. We also studied wages, earnings, and family incomes and found that workers having more education and training generally had more skills (Communications, Computational, Manual Dexterity, Group Relations) and were able to get and hold better-paying jobs. Today, we want to devote more attention to the cash value of education -- to learn more about the "payoff" that comes from investing in education and training.

* * *

In his excellent little book, RICH MAN POOR MAN (a Signet Paperback published in 1964), economist Herman P. Miller writes that: "Every study of the relationship between earnings and education shows that the more highly educated the man, the higher his earnings." Of course, there are many exceptions to this rule. We have all heard of the "self-made man" who dropped out of school at the age of 16 and then went on to become head of his own business firm, with a salary of $150,000 a year! On the average, however, there is no question that a person's chances of earning a higher income are much better if he has more education.

Is this because more schooling always makes people more productive? Not necessarily! The truth of the matter is that "educational attainment" is often used as a convenient method of "discriminating" in favor of certain people for jobs, training opportunities, promotions, etc. Employers give preference to high school graduates over dropouts in hiring. Labor unions sometimes require a high school diploma to qualify for apprentice training. So what does all this mean to you? To quote Mr. Miller again: "The fact remains that there are measurable financial returns associated with, though not necessarily the result of educational attainment." It means that your chances of having higher earnings (and a higher level of

living) can be improved by getting more education and training. Education does pay off.

Let's test this statement by looking at some facts concerning education and earnings. Table I shows the estimated lifetime earnings for men, according to the number of years of schooling they completed. Because these are averages and are projections, they will not, of course, be accurate for every worker. Moreover the figures will probably be revised (upward) as the years go by. (If this table looks familiar to you, it should! It is adapted from Table I in lesson #28.) Note that a worker with less than 8 years of schooling earns only 58% as much income as a high school graduate, while a college graduate will earn 56% more than a high school graduate.

Table I. ESTIMATED LIFETIME EARNINGS, BY YEARS OF SCHOOL COMPLETED*

Year of School Completed	Lifetime Earnings*	Earnings as % of H. S. Graduates
Less than 8 years	$143,000	58%
8 years	184,000	75
1 to 3 years of high school	212,000	86
4 years of high school	247,000	100
1 to 3 years of college	293,000	119
4 years of college	385,000	156
5 or more years of college	455,000	185

*Total earnings between age 18 and 64; data for males only. Estimates are based on actual earnings in 1959, with projections for the future, based on continuing growth of the economy.

SOURCE: Bureau of the Census, Income Distribution in the United States, by Herman P. Miller, Washington: U. S. Government Printing Office, 1966 (LC No. A66-7107) p. 270.

Questions: (Put a check-mark in the correct blank.)

I-1. A male worker with four years of college has lifetime earnings that are just about double the earnings of a high school graduate. True_____ False_____.

I-2. If you complete two years of college, you have an excellent chance of earning about twice as much in your lifetime as someone who drops out of high school in his third year. True_____ False_____.

I-3. In the introduction to today's lesson, it was stated that a high school diploma is worth nearly $1,000 a year in extra income compared with a dropout; and a college education is worth $3,000 a year in extra earnings. Check these figures against the data in Table I. (Hint: estimates of lifetime earnings were based on the assumption that a man's working life is 46 years.) Do you agree with the statements, or disagree? Agree_____ Diagree_____.

Now let's look at the lifetime earnings of workers in various occupations who have different amounts of schooling. Table II shows, for example, that a policeman who graduates from college could expect to earn about $286,000 in his lifetime -- about $7,000 a year, after graduation, based on projections of 1959 earnings. If his schooling ended with a high school diploma, his earnings would be $56,000 less.

Table II. LIFETIME EARNINGS BY OCCUPATION AND YEARS OF SCHOOLING

Occupation	1 to 3 years of high school	4 years of high school	1 to 3 yrs. of college	4 yrs. of college
Accountants & Auditors	$272,000	$286,000	$292,000	$361,000
Carpenters	193,000	209,000	207,000	229,000
Clerical Workers	203,000	218,000	225,000	258,000
Electrical & Electronic Technicians	263,000	270,000	263,000	--
Farm Labors & Foremen	97,000	117,000	138,000	167,000
Laborers (nonfarm)	157,000	173,000	174,000	192,000
Plumbers & Pipe Fitters	242,000	252,000	258,000	--
Policemen & Detectives	217,000	230,000	246,000	286,000
Sales Workers	232,000	276,000	306,000	287,000

Note: Estimates are for males only.
SOURCE: Bureau of the Census, Income Distribution in the United States, ibid., pp. 269-296.

Questions

II-1. Who has higher lifetime earnings, a Clerical Worker with two years of college, or an Electronic Technician with four years of high school? What kind of training did the Electronic Technician get to qualify for his job?

II-2. In general, do the facts support Miller's claim that "there are measurable financial returns associated with educational attainment"?

There are three things to keep in mind about these statistics on expected lifetime earnings:

1-- They do show that, in general, more education leads to higher earnings;
2-- They do not predict what any particular individual will earn in his lifetime (they only indicate what your chances are of earning a certain amount);
3-- The figures are subject to change as the economy grows and changes over time.

As an illustration of this third point, estimates of lifetime earnings by negro college graduates -- based on 1959 data -- probably will turn out to be incorrect in the long run. The Census Bureau reported that estimated lifetime earnings of negro college graduates amounted to $185,000, compared to $385,000 for white college graduates, and compared to $191,000 for white males who completed only eight years of schooling. However, earnings and family income of negroes have been going up relative to whites recently. In 1966, median family income of negroes was 58% of the median family income of whites. Annual earnings by negro men in 1966 ranged from two-thirds to four-fifths as much as whites having comparable education.

* * *

Question: How would you explain the fact that the average Negro college graduate could expect to earn less than the average White worker who stopped his education after the 8th grade?

* * *

Much of the data we have presented on lifetime earnings is concerned with high school and college education. There is no information about women's earnings, or about the type and quality of schooling. Why? The answer in part is that economists have only begun to study the payoff from education; much research remains to be done. Only a few findings have so far been published, for example, on the cash value of technical training. One study showed that a year after completion of a post-high school technical course in North Carolina, graduates were earning $553 a year more than their high school classmates; and at the end of the four years, the training-related earnings advantage had increased to $1,036.

* * *

Education provides many benefits to individuals and to the whole society. It helps to free man from ignorance; it strengthens democracy; it helps make the economy more productive. Education also provides a cash payoff to the individual worker who invests in his own "human capital" by getting more schooling and training. This is an important lesson for young people to learn, especially boys and girls growing up in low-income homes. Education can increase your chances of getting a better job as well as a better-paying job and offers a possible escape from poverty and dependency.

* * * * * * * * * *

Today's Lesson in Brief

Education is an investment in human resources that yields a cash payoff. Studies show that the more highly educated a person is, the higher his earnings. Education provides many benefits to the individual and to society as a whole. It offers a possible way out of poverty, deprivation, and dependency for children growing up in low-income families.

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The Benefits and Costs of Education

"An affluent democratic society can grow from strength to strength if it has the wisdom and the courage to invest in the development of its people."
-- Eli Ginzberg

Education provides economic benefits to the individual and to the economy as a whole, and also provides certain noneconomic benefits to the individual and society. Because the educational process makes use of productive resources, costs are necessarily involved in all educational activity. As long as benefits exceed costs, investments in education represent an efficient use of resources. Actual rates of return on investment in education are difficult to compute because some types of benefits, although extremely valuable, are hard to measure.

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In this lesson, we shall review some of the most important ideas and facts that we learned in previous lessons about the economic value and the costs of education. Then we'll consider some additional ideas on the noneconomic benefits that result from education. We'll learn the meaning of two very important economic terms: "social costs" and "social benefits."

Before reading ahead in this lesson, take a couple of minutes to jot down six important facts and ideas that you have already learned concerning the economic value of education:

1) _____

2) _____

3) _____

4) _____

5) _____

6) _____

☆☆☆Put a big "X" next to the item above that is most interesting and important to you, personally. Question: Why did you mark that particular item?

Your list of important ideas and facts about the economic value of education might look something like this:

1 -- Workers with more education generally have higher earnings.
(Lifetime earnings of high school graduates are $63,000 higher than dropouts; lifetime earnings of college graduates are more than $120,000 more than high school graduates.)

2 -- Education adds to the "skill bank" or "human capital" of a worker, increasing his employability, productivity, and earning power.

3 -- Rates of return on investment in human resources are frequently higher than rates of return on investment in nonhuman capital such as machinery, buildings, and equipment.
(Rates of return on the 8th year of schooling have been estimated at about 30%; returns on the 4th year of high school at 15%; and returns on the 4th year of college at 15%. Rates of return on investments in nonhuman capital are often below 10%.)

4 -- Improved education of the work force has contributed about one-fourth of the total growth in real national production.
(Increased schooling of workers contributed an estimated 23% of total growth of national production between 1929 and 1957.)

5 -- Workers in certain skilled occupations have higher lifetime earnings, even though they have less formal education, than more highly educated workers in other occupations.
(For example, plumbers and electricians with a high school diploma earn more than clerical workers and carpenters who are college graduates.)

6 -- The direct costs of formal education in the United States are about $70 billion a year and are financed chiefly by state and local government taxes.

* * *

What are some of the implications of these facts about the economic value of education--for the local community, the nation as a whole, and for you personally? How can we use the knowledge we have gained about the costs and benefits of education?

Knowledge of the economic value of education helps us to make more intelligent plans and decisions, as individuals and as a group. Why? Because this knowledge tells us more about the consequences of certain actions (such as completing more years of schooling); knowing the results of our actions helps us make wiser judgments about the methods we use to achieve our goals. Research discoveries in the 1960's indicate that we can achieve the goal of increased national production by investing in the education of our workers. Individual workers can achieve their personal goals of increased earnings and economic security by accumulating more human capital. Unemployment and poverty can be reduced by improving the education of the work force.

* * *

Question: In the quotation at the beginning of this lesson, Professor Ginzberg suggests that it will take both "wisdom and courage" on the part of the American people to invest in the development of our people. In view of the above discussion, do you feel that we now have the necessary knowledge and wisdom to make intelligent decisions about investments in human resources? Please explain your answer.

* * *

The research findings on the economic value of education have stressed benefits and costs that are fairly easy to measure, such as individual earnings and direct expenditures on education. However, there are additional benefits of education--both economic and noneconomic--that need to be recognized. (There are also some additional costs, such as the opportunity costs of students who could be working and earning income if they were not enrolled in schools, the discomfort and anxiety that some students feel because they must attend school, and the SOCIAL COSTS involved in overcrowded schools with standardized courses and lack of personal contact between teacher and student.

We know, for example, that education can bring satisfaction and pleasure to a person as well as increase his productivity and earnings. Education can open up new areas of human development such as the ability to appreciate good music, paintings, literature and poetry, and engage in philosophical or spiritual reflection. These are consumer-type benefits. In other words, education can not only improve our ability to make wise decisions about production, but also about consumption (the things we consume and how we consume them) and the way we use our free time.

Beyond these noneconomic (so-called psychic income) benefits to the individual, there are also benefits that "spill over" from the educated individual to improve the well-being of other members of society. These are called SOCIAL BENEFITS. One example is the direct contribution that education makes to increased national production; another is the indirect contribution that education makes to the advancement of knowledge. There are also social benefits that lie outside the usual boundary lines of economics. For example, citizens who can read and write and understand economic and social issues are able to vote more intelligently in local, state, and federal government elections. An educated population is a basic requirement for political democracy. Moreover, there is less crime, mental illness, juvenile delinquency, and physical violence when people are better-educated. Parents with more education are able to give their children certain "cultural advantages" in their family life.

Because these "psychic benefits" and "social benefits" of education are so great--the social costs are relatively minor--it will be impossible to get an accurate measure of the rate of return on investments in education until ways are found to include the full benefits in our calculations.

* * *

Discussion Questions

1. In what sense do the rates of return on investments in education that we have seen tend to understate the value of education?

2. Which benefits of education do you think are more important, the economic or noneconomic? Why?

3. In your judgment, which benefits of education are more important, the individual benefits, or the social benefits? Why?

4. Referring again to Professor Ginzberg's quotation at the beginning of this lesson, in what sense will it require courage to make the appropriate investments in our human resources?

* * * * * * * * * * *

Today's Lesson in Brief

The benefits that result from education include increased earnings for the individual worker and consumer-type benefits related to his personal development and satisfaction. Education also results in social benefits that spill over from the individual and are enjoyed by the community as a whole. Economic examples include increases in Gross National Product and advances in knowledge; noneconomic examples include better informed, more responsible citizens and less anti-social behavior. The costs of educational activity include direct tax costs, indirect costs of foregone earnings, and such psychic and social costs as personal discomfort or sacrifice and crowded schools. Many estimates of the rates of return on investment in education are understated because they fail to include individual consumer-type benefits and social benefits.

DECISION MAKING AND PLANNING

"Who Am I? What Am I Becoming?"

A person's work experience and attitudes will have an important influence on forming his identity--determining the kind of person he is and the place he makes for himself in society. Individuals go through various stages of development relative to work and personal fulfillment.

* * * * * * * * * *

What are the factors and experiences that have influenced you as you are today and what perhaps will influence you as you become an adult? We do change with time and experience! Thus, who we are is constantly changing; it's a lifelong process. Let's explore how you form your identity and what role work plays in this process.

It's a difficult thing to know oneself--and sometimes very inconvenient! But let's try to analyze ourselves.

O.K., here you are. What has influenced who you are today?

Examples:	List some others:
1. Family	4.
2. Travel	5.
3. Extracurricular activities	6.

Let's anticipate what factors, in addition to the above, may influence "who you are" in the future as you become an adult: (List some others.)

1. Education	5.
2. Job	6.
3. Friends	7.
4. Hobbies	8.

* * *

Have you ever thought about the many things you are striving to accomplish while you are still in your teens? List some:

1. New and better relationships with both sexes who are your own age.
2. Achieving more economic independence. (Earning your own money).
3.
4.
5.

You have considered some of the factors which have influenced your development in the past and some that are likely to affect you in the future. Can we build a dynamic model to show the overall pattern of vocational development throughout a person's lifetime? The following scheme attempts to do this. (Although the ages when we develop our attitudes and skills may differ somewhat, the estimates of time are generally accurate.) This path of development can help men and women realize the values listed in the sketch below.

STAGES OF VOCATIONAL DEVELOPMENT

	(Age)
1-- IDENTIFICATION WITH A WORKER. Father, mother, other significant persons serve as "models." The concept of working becomes an essential part of your life.	5-10
2-- ACQUIRING THE BASIC HABITS OF INDUSTRY. Learning to organize your time and energy to get a piece of work done (school work, chores). (Teddy Roosevelt used to say: "When you play, play hard; when you work, don't play at all.")	10-15
3-- ACQUIRING IDENTITY AS A WORKER IN THE OCCUPATIONAL STRUCTURE. Choosing and preparing for an occupation, through education and training. Getting work experience as a basis for occupational choice and for economic independence.	15-25
4-- BECOMING A PRODUCTIVE PERSON. Mastering the skills of your occupation. Moving up the ladder within your occupation.	25-40
5-- HELPING TO MAINTAIN A PRODUCTIVE SOCIETY. Emphasis shifts toward the society and away from the individual aspect of the worker's role. The individual sees himself as a responsible citizen in a productive society. He pays attention to the civic responsibility attached to his job. He is at the peak of his occupational career and has time and energy to add broader types of activity. He pays attention to introducing younger people into stages 3 and 4.	40-65
6-- CONTEMPLATING A PRODUCTIVE AND RESPONSIBLE LIFE. This person is retired from his work or is in the process of withdrawing from the worker's role. He looks back over his work life with satisfaction, sees that he has made a social contribution, and is more or less pleased with it. While he may not have achieved all of his ambitions, he accepts his life and believes in himself and his identity as a productive person of dignity and worth.	65+

Does it come as a surprise to discover that we are developing attitudes and habits about work and workers all during our lives?

As you think about what you have learned in Stages I and 2, give some additional thought to the following questions: (and be prepared to answer these questions in class).

1) How do you view your dad's job?

2) How do you view your mother's job? (If she's a full-time housewife; consider her role at that; if she is employed part-time or full-time, include this along with her work as a housewife and mother.)

3) Are there any other adult friends or relatives who have influenced your attitude toward work? If so, how?

4) How do you organize your time to get a task done? Do you go ahead and do your studying and chores at home before you start playing or doing the other things you want to do?

5) Have you had any part-time jobs that have helped you form ideas about work--such as whether you want to work with objects (manual work), or ideas, or people? What have you learned about getting along with people, taking responsiblity, and following through to complete jobs?

* * *

Whether a person is going to school or is employed at a job, he needs to feel that:

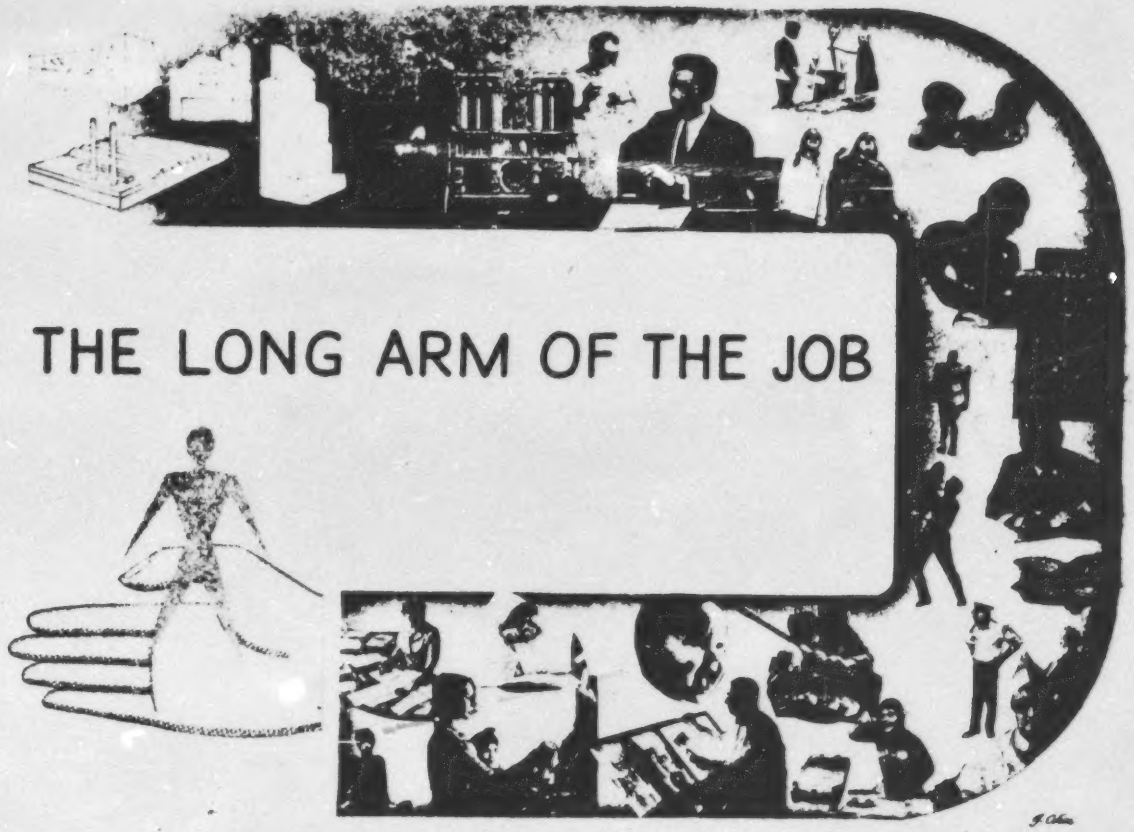
1-- He is striving toward one or more goals,
2-- He is making progress or that he is "marking time" only temporarily,
3-- He can enjoy anticipating what will happen next,
4-- He is doing something worthwhile.

Human beings have always found clever ways to "run away from themselves." Today we can keep ourselves so busy, fill our lives with so many activities, stuff our heads with so much information, and involve ourselves with so many people that we never have time to probe the fearful and wonderful world within us--and begin to learn "who I really am" and "what I am becoming."

* * * * * * * * * *

Today's Lesson in Brief

Philosophers have urged: "Know thyself," and "To thine own self be true." We are complex individuals! To know ourselves and what we want from life, both personally and vocationally, is a life-long process. We need to reexamine ourselves and our goals periodically since new experiences play a big part in changing who we are.



THE LONG ARM OF THE JOB

The job influences our outlook on life and the way we live--who we are and what we are becoming. Since a job may play such an important role in our life, we should be careful in selecting our occupation and particular job. It may be necessary for us to look at more than the size of the pay-check that comes with the job. We may want to find out what satisfactions other than income we can get from the job.

The Formula: Aspirations + Ability + Action = Achievement

Most of us want to achieve something. We have a kind of "instinct of workmanship" that makes us actively try to achieve a goal. But how do we go about achieving? What are the personal and social factors which help determine what we are able to achieve. There is a formula: Aspirations + Ability + Action = Achievement that offers some useful guideposts. This formula can be helpful to you in achieving whatever goals you set in life.

* * * * * * * * * *

Let's construct a "Formula for Achievement" in terms of four steps to success (however we choose to define success):

* * * * * * * * * * * *

4 -- ACHIEVEMENT: reaching your goals

3 -- ACTION: effort with purpose and enthusiasm

2 -- ABILITIES: talent of various kinds

1 -- ASPIRATIONS: setting goals

* * *

Let's look at the first three A's -- Aspirations, Abilities, and Action -- and consider some of the things involved in these ideas.

First, Aspirations. What goals have you set for yourself? What are your past achievements that you can build upon? What are your interests, ambitions, and needs? By answering these questions you can begin to define your aspirations. (You may want to review the earlier lesson on "Aspirations and Achievement.")

You will need different types of Ability to obtain your goals. The amount and types of talent needed to achieve your goals depend upon the goals you select. As you think about the specific abilities you want to develop, remember the basic manpower skills--Communication, Computation, Manual Dexterity, and Group Organization. The "CCMG skills"--with special characteristics of durability and transferability--are apparently worth while in view of the changing nature of jobs in our economy.

Aspiration and Ability alone will not guarantee Achievement. You must take Action to achieve goals (well-defined and continuing effort directed toward a specific goal is called for). To take action is often difficult for people. It is relatively easy to sit and plan, but a plan that is not acted upon will never lead to achievement.

The following story clipped from a newspaper a few years ago illustrates how one man overcame serious obstacles to achieve his goals.

CASE #1 "Expert Who Saved Many From Cancer Is Dead Of Same Disease"

> "Dr. Grant B. Ward, sixty-one, cancer expert of Johns Hopkins University, died today of the same disease from which he had saved countless patients.
>
> "Dr. Ward overcame a tremendous handicap to continue his career after developing a tumor on the spinal cord of his neck in 1942. The tumor was non-cancerous but its removal cut a nerve and deprived him of the power to raise his right hand and to bend his elbow.
>
> "Although he could still use the fingers and forearm muscles of his right arm, Dr. Ward's career as a surgeon appeared ended. But with the help of experts in appliances, together with his own determination, Dr. Ward made a steel and leather harness equipped with springs to perform actions of his useless muscle.
>
> "To win over his handicaps, Dr. Ward developed certain special skills with his left hand. He asked for no special adjustments in the operating room, except that the table be raise to a higher level. The internationally known expert on head and neck tumors continued performing very difficult and delicate operations."

* * *

Question: What were Dr. Ward's Aspirations? What special Abilities did he develop? What Action did he take?

Let's look at how types of societies influence our achievement on the job. There are basically two kinds of societies--the ASCRIBED society and the ACHIEVEMENT society. In an ASCRIBED society, jobs are distributed on the basis of who a person is rather than what he can do. As you can imagine, when jobs are assigned or ascribed on the basis of status, caste, or heredity, it's difficult to move up the economic and social ladder; there isn't much opportunity for "upward mobility." The ascribed society usually doesn't change very rapidly.

In an ACHIEVEMENT society, jobs are distributed mainly on the basis of a person's ability to perform the required tasks. He may have to meet

certain standards such as passing a test or having a certain amount of education or training.

No society is completely ascribed or achievement. For example, inheritance of property and having relatives or friends with "connections" may influence the opportunities of a worker, even in an achievement society.

Questions:

1. Is our society mostly an ascribed or achievement society?
2. Can you think of some specific examples of how jobs are actually distributed in our society?
3. What factors set limits on how much people in our society are able to achieve? (Three such factors are listed: please add some others.)

1-- Ability
2-- Environment
3-- Education
4--
5--
6--

* * *

It has been noted by social scientists that the strongest force acting against the formation of a sense of "class" in America is the existence of a strong faith on the part of the people that ambition, ability, and hard work assure success. It is thought that opportunities are free and equal to all and that education and training are the key to these opportunities. During your grandparents' time a familiar sucess story was based on Horatio Alger, the poor boy who by hard work went from "rags to riches."

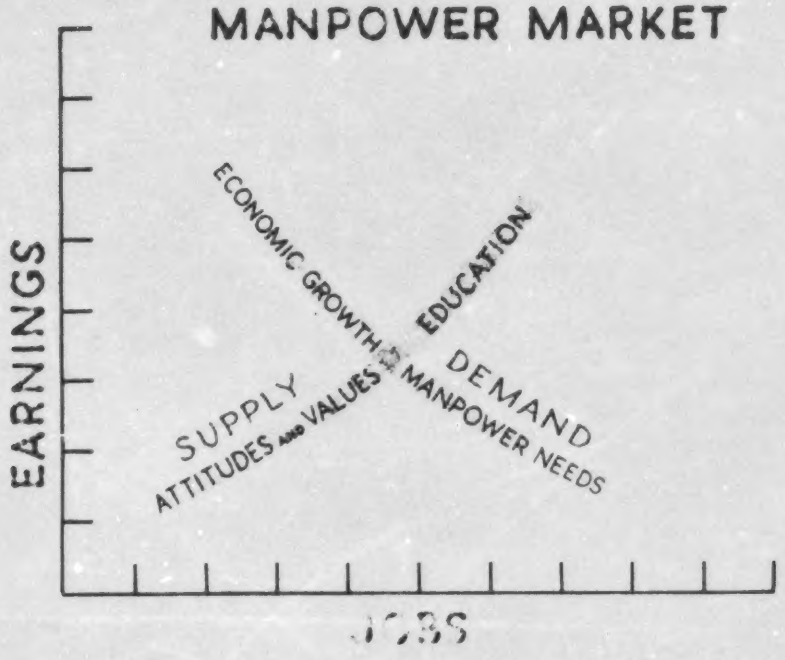
Questions: Is it really possible to go "from rags to riches" in America today? Can ability and hard work guarantee success for all Americans? Why or why not? Are opportunities free and equal to all? Explain your answers, giving specific examples.

* * * * * * * * * *

Today's Lesson in Brief

Successful people in our society have for the most part followed the four steps in our "Formula for Achievement." They have combined Aspirations, Abilities, and Action for Achievement. There are many opportunities to apply the formula for achievement in American economic life--by investing in your own "human capital" and by acquiring the skills needed for intelligent decision-making as a worker, consumer, and citizen. Complete equality of opportunity does not exist in America, or anywhere else. Obstacles to achievement exist, even in our relatively open society.

SUCCESS IN THE WORLD OF WORK



Achievement or success in the world of work--both in economic and noneconomic terms--depends upon the factors shown above that influence the supply of and demand for human resources.

First The Plan, Then The Job!

Choosing an occupation is one of the most important decisions that you will make during your life. It will help to approach this decision in a rational and systematic fashion. By analyzing yourself and studying the types of employment opportunities available, you should be able to increase your chances of finding a job that will meet your particular needs and provide personal satisfaction and rewards. Those who plan for their future are more likely to have a better future.

* * * * * * * * *

"Two roads diverged in a wood, and I--
I took the one less travelled by,
And that has made all the difference."

-- Robert Frost

You will make many important decisions in your lifetime. Often these decisions will involve choosing among two or more possible courses of action. The decisions you make will to a great extent shape your life and determine whether you will find it meaningful, enjoyable, and fulfilling. It has been said that the four most important things in your life are your birth, your death, your marriage partner, and your job. About your birth you had nothing to say. Your death is largely out of your control. About the selection of your wife or husband you have much less to say than you now believe. But the choice of a job and a career is, within fairly broad limits, in your own hands.

One reason why job planning is desirable in today's rapidly changing manpower market is the fact that the "margin of error" that young people had in the past is rapidly disappearing. In the past, students could quit school and rather easily go out and find a job--usually as an unskilled laborer. Times have changed. As you have learned in this course, the number of unskilled jobs is rapidly declining. The disappearance of the margin of error is also a result of the rising level of schooling obtained by the labor force.

* * *

Today we will be reading, thinking, and talking about vocational planning and decision-making. Will you please read the first page of your booklet, CHOOSING YOUR OCCUPATION (to be handed out in class) and be prepared

to comment on the following quotes from page 1:

-- "The future course of your life will depend in large measure upon the wisdom of your vocational choice."
-- "A job is not just work and pay; what it will lead to 10 years from now is what counts."

* * *

Pages 3 through 11 of your booklet consider how you can find out which occupation is right for you. Before reading these pages, take two or three minutes to write down some ideas about how you can find out which occupation is right for you. (Hint: What are your personal goals? What types of jobs are there to match your interests and talents?)

1. _____

2. _____

3. _____

4. _____

Now read pages three through nine and when you are done, consider the following statement: "Vocational planning is more than finding a job. It is discovering yourself. The important goal in occupational planning is not merely to learn to market oneself but also to discover oneself." Do you agree with this statement, or disagree? When you have some time you can fill in the information on the self-inventory on pages eight and nine of the booklet. This self-inventory is an important step in occupational planning and career decision-making.

Let's turn to pages 10 and 11 and read these two pages. Note the great variety of sources of help on finding information on employment opportunities listed on page 11. The local office of the Oregon State Employment Service, your school counselor, and your teacher are very important and worthwhile sources of occupational information.

* * *

Please read pages 12 and 13 of the booklet CHOOSING YOUR OCCUPATION. Carefully read the following statement on occupational choice and decision-making: "The individual's decision on an occupation is generally limited to those occupations about which he knows something, which are appropriate to his class position and sex status, and which are not barred by ethnic discrimination or by limits of physical or mental ability and money."

Question: What is your reaction to this statement? (True? or False?)

* * *

Now let's turn to page 14 and read this page and pages 15 and 16. (Your teacher has a copy of the OCCUPATIONAL OUTLOOK HANDBOOK and some other material which you may want to look at some time after class or after school is out.) Note the summary on page 15. These are some of the things you want to think about and do in planning and choosing an occupation.

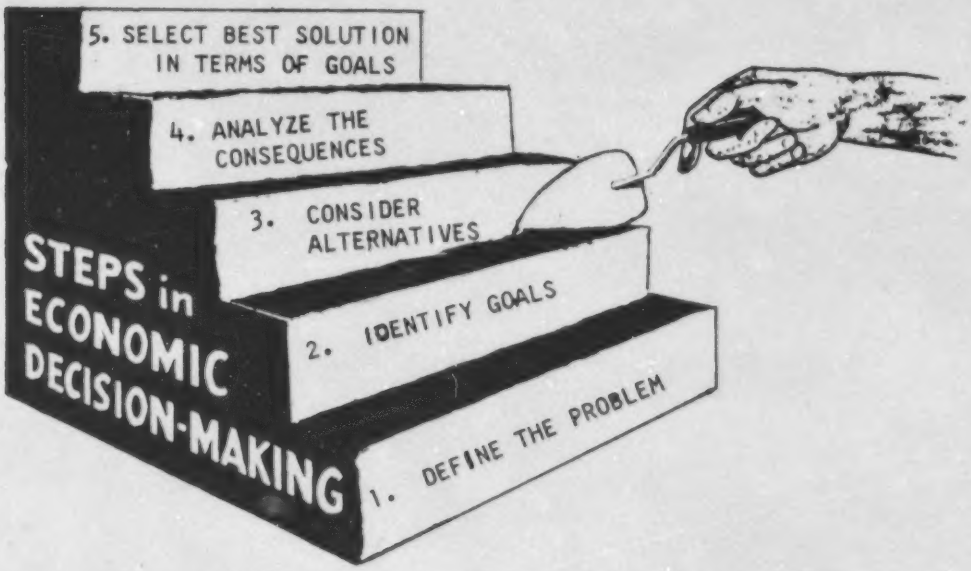
Now that you have explored some of the things involved in vocational planning, you can think about how you personally will benefit and how the nation can gain from your occupational planning.

* * * * * * * * * *

Today's Lesson in Brief

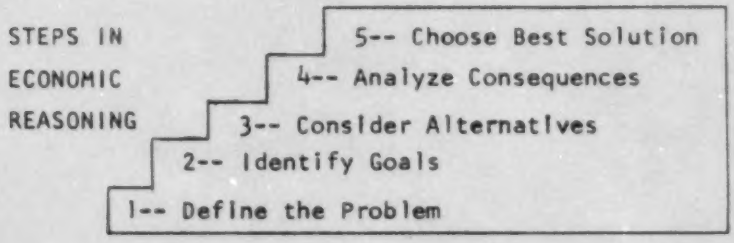
Decisions shape our lives, and one of the most important of all decisions is our choice of an occupation. We have a great deal of freedom in choosing our occupation in America. We can make wise use of this freedom by approaching vocational choice in a rational and systematic matter. The margin of error that existed in the past for young people who failed to plan their occupational future is rapidly disappearing. Planning is a way to increase your chances of finding meaningful and rewarding work. Knowledge of the manpower market and of yourself helps you find work that is right for you. This will result in greater productivity and will contribute more to the nation's total output of goods and services.

PLANNING AND RATIONAL DECISION-MAKING


STEPS in ECONOMIC DECISION-MAKING
1. DEFINE THE PROBLEM
2. IDENTIFY GOALS
3. CONSIDER ALTERNATIVES
4. ANALYZE THE CONSEQUENCES
5. SELECT BEST SOLUTION IN TERMS OF GOALS

Careful planning and rational decision-making can help you make wise choices in any area of life. Using facts to help define a problem clearly, identifying the goals you want to achieve, considering a wide range of alternative ways that might be used to reach the goals, and analyzing carefully the probable consequences of each of the alternatives is a procedure designed to produce wise choices and realistic decisions. Following these steps can help you plan your education and training to take maximum advantage of occupational opportunities in the manpower market.

An Exercise in Economic Reasoning: Review Lesson



The steps in economic reasoning can be applied to a variety of economic decisions, including the choice of a career. These five steps are valuable tools for analyzing yourself and the opportunities that exist for you in the manpower market. The concepts, ideas, and data we have discussed in the course--especially in lessons #25 through #51--provide information that you can use in applying the steps in economic reasoning to career planning.

* * * * * * * * * *

You will recall in lesson #15 (What Are the Steps in Economic Reasoning?) that we studied a systematic step-by-step approach to problem-solving. This five-step method of economic reasoning is useful to you in planning your career and making decisions about your participation in the manpower market. You can use the five steps as a framework for analyzing yourself and the information you have gained concerning the manpower market, the economy, and the world of work.

A NOTE OF CAUTION: You should not think that you are actually making your career choice at this time, or that you are somehow deciding today what your whole vocational future will be. This is an exercise to help you develop skill in planning a career. Be serious and thoughtful about the exercise--consider the ideas and information that you personally will want to weigh before you actually do choose an occupation--but don't think that you are being asked today to decide your life's work.

* * *

The rest of this lesson takes each of the five steps in logical order and illustrates the concerns and types of questions you will want to consider as you think about your career. By answering the questions that are raised, you will in fact be using the steps in economic reasoning. Lessons that give information about the questions are identified with numbers in parentheses. Underlined lesson numbers identify the lessons you have been reading. Lesson numbers not underlined are lessons which will provide supplementary information.

1. Define the PROBLEM. You are making decisions right now about what school curriculum to follow and what subjects to take. In a few years you will be entering the manpower market. Should you begin to plan and make decisions now regarding your future role in the manpower market and world of work? Will an understanding of manpower and the economic world increase your chances of successful employment? Here are some things to consider:

1-a. What are the economic and noneconomic functions of work? (#26, 29, 39)

1-b. What factors affect my chances of successful participation in the manpower market? (#27, 31, 32, 38, 39, 43, 44, 45, 49)

1-c. What are some personal and social benefits from career planning? (#28, 29, 36, 38, 51)

1-d. My PROBLEM is (write out a "definition: of the problem of your career choice):

* * *

2. Identify GOALS. You can identify your goals by asking yourself questions such as: Who am I? What do I want from life? From a job? Do I want to enter a particular field of work? Make a lot of money? Travel? Have leisure time? What are my interests and goals? Only you can answer what it is you want from life in general and a job in particular. Here are some ideas that might be helpful to you in finding out what your personal interests and goals are.

2-a. Who am I? What am I becoming? (Identify some of the attitudes, values, and experiences which influence who you are and what you are becoming.) (#41, 46, 47, 48, 49, 50)

2-b. What are my aspirations in life? (fame? fortune? power? happiness?) (#46, 49, 50)

2-c. What do I want from a job? (#26, 28, 29, 39, 41, 42, 46)

2-d. My GOALS are (write out a brief statement of your personal goals):

* * *

3. Consider ALTERNATIVE METHODS for reaching your goals. Employment offers you an opportunity to achieve some of your personal goals. There are many different kinds of occupations in our economy, and jobs are available in various industries. But as you think about potential types of occupations, you will want to consider such questions as: Do I need schooling or training beyond high school to qualify for employment? What types of work experience should I get to help obtain and keep a job?

3-a. What are some of the jobs I find interesting? (White-collar? Plumber?) (#34, 35, 37, 40, 41)

3-b. In what industries would I like to be employed? (#34, 40)

3-c. Which of the occupations that I am interested in seem to offer the best employment opportunities in the 1970's? (#41, 43)

3-d. Which of the industries that I am interested in seem to offer the best employment opportunities in the future? (#45)

3-e. How much and what kind of education, training, and experience will I need to qualify for the various occupations that I find interesting? (#34, 35, 37, 44)

3-f. ALTERNATIVE METHODS of reaching my goals are (write out two or three alternative approaches to achieving your stated goals):

* * *

4. Study the probable CONSEQUENCES of the alternative methods. This involves asking such questions as: If I decide to enter an occupation that requires college or post-high school training, what grades must I earn in school? How will I pay for my post-high school education? What types of rewards and satisfactions will I get from successful participation in the manpower market? Many different types of satisfactions and rewards come from full participation in the manpower market. Employment will influence your whole way of life. However, competition does exist for the best jobs; and obstacles have to be overcome in order to succeed.

4-a. What are the economic rewards from successful participation in the manpower market? (#26, 28)

4-b. What noneconomic satisfactions can I get from being employed in a job that's "right" for me? (#29, 36, 38, 39, 42, 49)

4-c. How will a job affect the way I live? (#26, 28, 29, 33, 38, 39, 41, 50)

4-d. What type of competition will I have for tomorrow's jobs? (Will the workers be young or old? Men or women? Well-educated?) (#31, 44)

4-e. The probable OUTCOMES of my use of the different methods are (write out a few of the probable outcomes of choosing just two of the alternatives):

5. CHOOSE the methods that offer the best solution to your problem in terms of the goals you have picked. You can now make a tentative choice of a course of action to achieve your career goals. This choice should reflect your own personal preferences and your understanding of what this decision requires of you. You also should be aware of what is involved in carrying out this decision. (Effective participation in the manpower market is one means you can use to achieve some of your goals in life. However, your goals will probably change with education and experience, and it isn't easy to know right now what occupations are best suited for your needs.) Keeping in mind the results of the first four steps, proceed to step #5.

5. I CHOOSE the following (tentative) solution to solve my career-choice problem (write out a brief statement of your decision):

* * * * * * * * * *

Today's Lesson in Brief

The steps in economic reasoning are useful tools to the individual who wants to plan and make decisions about his career. You have used the five steps to study yourself and the occupational opportunities in the manpower market. There are many different occupations, some of which will offer the opportunities you are seeking. The financial and nonfinancial rewards of employment have been identified. Occupational choice and earnings are different for those who come to the manpower market with a good education and those who don't. Your chances of successful participation in the manpower market will be improved if you make some tentative occupational choices early and begin planning and taking action aimed at reaching your occupational goals.

How Can I Get the Skills Needed for Tomorrow's Jobs?

Most of tomorrow's jobs will require more skills and different skills than jobs required in the past. In order to acquire the needed skills, men and women can enroll in a variety of different training programs available in many areas of the country. A knowledge of these educational opportunities will be valuable to you in preparing for your entry into the manpower market of the 1970's.

• • • • • • • • • •

Before we examine the educational and training programs available to provide you with occupational skills, let's see where the men and women in today's labor force actually got their formal job training. Workers have acquired formal job training in many different types of schools and training programs. Table I shows the source of formal training for adult workers having such training as of April 1963. The table indicates, for example, that one out of every nine workers (11%) who had received formal job training got his training in the Armed Forces. Of all the women workers having formal job training, 28% received their training in Special Schools such as business, nursing, and beauty schools.

Table I. SOURCES OF FORMAL TRAINING PROGRAMS TAKEN BY WORKERS*

Source of Training	Total (percent)	Men (percent)	Women (percent)
High School	38%	30%	55%
Special School (business, nursing, beauty, etc.)	19	15	28
Armed Forces	11	16	1
Apprenticeship	8	12	1
Company School	7	7	5
Correspondence Courses	6	8	2
Technical Institute	6	8	2
Junior College	5	4	6
TOTAL ALL SOURCES	100%	100%	100%

*Includes all workers in the civilian labor force 22-64 years of age, have less than three years of college; data for April, 1963.

SOURCE: U. S. Department of Labor, Office of Manpower, Automation, and Training, Formal Occupational Training of Adult Workers, December 1964 in S. Wolfbein, Education and Training for Full Employment, 1967, p. 71.

Questions from Table I:

1. Company Schools operated by American business firms provided most of the formal job training that their employees had as of 1963. (Please check the correct answer.) True_____ False_____.
2. What percentage of workers had received their training from technical institutes?
3. What was the source of training for over half of the women workers?
4. What three training sources together accounted for two-thirds of all training received by workers?
5. Why do you suppose so few women are trained by apprenticeship programs?

* * *

Let's begin our examination of available training programs by looking at the ones offered in the public High Schools. Over half of our high schools throughout the nation offer vocational programs for their regular day students and also for employed and unemployed out-of-school youth and adults. (Six million people are enrolled in these programs -- half of them are adults). Vocational education programs are designed to train both men and women for useful employment in skilled trades and industry, agriculture, home economics, office occupations, and retail trade. These vocational courses prepare students for such occupations as automobile mechanic, apprentice carpenter, farmer, practical nurse, salesman, secretary, and machine operator.

In Ohio there are more than 200,000 people enrolled in vocational education programs. (Two-thirds of these students are adults). More high school students in Ohio are enrolled in the clerical office practices program (typing, filing, using office equipment), than all the other vocational programs combined. Some students who are enrolled in a general or college preparatory program arrange to include individual vocational courses in their studies in order to gain occupational skills. Many high schools now include work experience or "cooperative" programs in their curriculum. These programs are usually a part of the vocational curriculum of the school and combine study in the classroom with work experience on a job. The general purpose of these work experience programs is to prepare students for useful employment in occupations while they are completing their high school education.

* * *

About 14% of the workers in our civilian labor force received their formal occupational training by attending a college or university for three or more years. There are many different types of programs in the colleges and universities that will provide many CCMG skills (especially Communications, Computation, and Group Organization) needed for employment in professional and other types of occupations. Junior Colleges -- two year colleges -- also offer many types of programs which provide the means of learning a variety of job-related skills. For example, some junior or

"community" colleges offer programs in computer programming, nursing, and automotive and aircraft mechanics.

* * *

Special Schools and Technical Institutes -- both public and private -- offer a wide variety of programs for preparing for technical, office, industrial, and personal-service occupations.

Questions. What types of vocational education programs does your high school offer? For what occupations can the vocational education programs in your high school help prepare you? What public or private technical, business, and trade schools are there in your community?

* * *

In the remaining three types of training programs we are going to discuss, the worker gets his training while on the job. This form of training involves learning a job by actually practicing the skills needed to perform the work. It is the oldest type of program for learning occupational skills. Craftsmen and tradesmen have been recruited and trained on the job since the dawn of history. The men who shaped and laid stone for the pyramids in Egypt, who wove silk in northern Italy during the Renaissance, who built ships on the River Clyde in Scotland in the 18th century, or who printed copy for Benjamin Franklin in Philadelphia were selected and trained at the workplace for their highly skilled work. Training and manpower experts estimate that in the past about 60% of our workers just "picked-up" the skills (either on the job or off the job, without formal training) needed to do their current jobs.

Formal on-the-job training (OJT) is provided by many employers in cooperation with the U. S. Department of Labor. Most OJT in American industry is sponsored by private business firms, but OJT training is supported by the Manpower Development and Training Act (MDTA). This act creates training programs that are a partnership between cooperating employers and the federal government. In 1966, MDTA authorized OJT for about 95,000 workers (three out of four were men). Two-thirds of these OJT trainees were being prepared for skilled or semiskilled blue-collar occupations.

The MDTA also finances other training programs aimed primarily at unemployed persons who do not have the skills needed to get today's jobs. These programs are operated by public or private training institutions with supervision from the vocational education agencies of the state government. In the first four years of these programs -- 1962 through 1966 -- over 265,000 workers had completed their training. Men received training in such occupations as automotive mechanic, baker's apprentice, printing type-setter, and electrical appliance serviceman. Women -- who make up 40% of trainees -- were being prepared to work in such occupations as key-punch operator, psychiatric aide, receptionist, and X-ray technician.

* * *

Questions: Please check the correct answer.

1. Occupational training on the job has almost died out in the United States. True_____ False_____.

2. The Manpower Development and Training Act supports two different types of training programs: OJT and Institutional. True_____ False_____.

* * *

Apprenticeship programs are available for young men and women to learn the skills they need for specific occupations such as cosmetologist, book binder, dental technician, plumber, carpenter, and tool and die maker. What are apprenticeship programs? They are formalized on-the-job training for learning skilled crafts, usually sponsored by labor unions, employers, and the federal, state, and local governments. (About 8,000 workers in Ohio and 260,000 in the nation are in apprenticeship programs.) You can learn approximately 350 different skilled trades through apprenticeships. Most of these trades are in the construction, printing, and metal-working industries. The training of an apprentice involves learning skills on the job, learning a wide range of skills over a period of two years or more, training under a written agreement with an employer and usually a labor union, and going to job-related classes at a school. Requirements for apprenticeship training vary among states and occupations. The basic qualification for this type of training is that the apprentice be capable of learning the skills necessary to become a journeyman (for example, to become a journeyman carpenter, plumber, electrician). Question: What types of apprenticeship training are available in your community?

* * *

The programs we have described above reflect a growing concern in our nation with the "manpower revolution" taking place in our economy and the need for workers to develop new and better skills. These skills are necessary to perform the jobs being created by the process of technological change and economic growth. In response to these manpower needs, the federal government passed the Manpower Development and Training Act in 1962. This was the start of a new "national manpower policy" designed to increase the investment in human resources and develop the occupational skills needed for the economy of the 1970's and beyond.

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Today's Lesson in Brief

There are many different educational and training programs available to help you learn the skills needed for tomorrow's jobs. Vocational education programs -- some of which involve actual work experience -- are available in many high schools. Colleges, universities, junior colleges, and public and private technical, business, and trade schools offer many different programs for learning work-related skills. On-the-job training is provided by many employers. The federal and state governments sponsor MDTA training programs. Apprentice programs are also available to learn skilled trades. Regardless of what occupation you are interested in, there usually will be a variety of different education and training programs you can enroll in to obtain the skills needed to qualify for employment.

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Education's Payoff

"Let ignorance talk as it will, Learning has its value."

-- La Fontaine

Investments made in human resources result in benefits or "payoffs" that can be measured in dollar amounts. Education is one of the most important forms of investment in people. The cash value of a complete high school education is almost $1,000 a year greater than the value of a high school dropout's education. A college education on the average pays off at the rate of $3,000 per year in extra earnings above what a high school graduate receives.

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In earlier lessons we saw how education (along with healthful food and housing, medical care, etc.) could be considered an "investment in human resources" -- the use of manpower, capital, and natural resources to help men and women improve their productive capacity. We also studied wages, earnings, and family incomes and found that workers having more education and training generally had more skills (Communications, Computational, Manual Dexterity, Group Relations) and were able to get and hold better-paying jobs. Today, we want to devote more attention to the cash value of education -- to learn more about the "payoff" that comes from investing in education and training.

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In his excellent little book, RICH MAN POOR MAN (a Signet Paperback published in 1964), economist Herman P. Miller writes that: "Every study of the relationship between earnings and education shows that the more highly educated the man, the higher his earnings." Of course, there are many exceptions to this rule. We have all heard of the "self-made man" who dropped out of school at the age of 16 and then went on to become head of his own business firm, with a salary of $150,000 a year! On the average, however, there is no question that a person's chances of earning a higher income are much better if he has more education.

Is this because more schooling always makes people more productive? Not necessarily! The truth of the matter is that "educational attainment" is often used as a convenient method of "discriminating" in favor of certain people for jobs, training opportunities, promotions, etc. Employers give preference to high school graduates over dropouts in hiring. Labor unions sometimes require a high school diploma to qualify for apprentice training. So what does all this mean to you? To quote Mr. Miller again: "The fact remains that there are measurable financial returns associated with, though not necessarily the result of educational attainment." It means that your chances of having higher earnings (and a higher level of

living) can be improved by getting more education and training. Education does pay off.

Let's test this statement by looking at some facts concerning education and earnings. Table I shows the estimated lifetime earnings for men, according to the number of years of schooling they completed. Because these are averages and are projections, they will not, of course, be accurate for every worker. Moreover the figures will probably be revised (upward) as the years go by. (If this table looks familiar to you, it should! It is adapted from Table I in lesson #28.) Note that a worker with less than 8 years of schooling earns only 58% as much income as a high school graduate, while a college graduate will earn 56% more than a high school graduate.

Table I. ESTIMATED LIFETIME EARNINGS, BY YEARS OF SCHOOL COMPLETED*

Year of School Completed	Lifetime Earnings*	Earnings as % of H. S. Graduates
Less than 8 years	$143,000	58%
8 years	184,000	75
1 to 3 years of high school	212,000	86
4 years of high school	247,000	100
1 to 3 years of college	293,000	119
4 years of college	385,000	156
5 or more years of college	455,000	185

*Total earnings between age 18 and 64; data for males only. Estimates are based on actual earnings in 1959, with projections for the future, based on continuing growth of the economy.

SOURCE: Bureau of the Census, Income Distribution in the United States, by Herman P. Miller, Washington: U. S. Government Printing Office, 1966 (LC No. A66-7107) p. 270.

Questions: (Put a check-mark in the correct blank.)

I-1. A male worker with four years of college has lifetime earnings that are just about double the earnings of a high school graduate. True_____ False_____.

I-2. If you complete two years of college, you have an excellent chance of earning about twice as much in your lifetime as someone who drops out of high school in his third year. True_____ False_____.

I-3. In the introduction to today's lesson, it was stated that a high school diploma is worth nearly $1,000 a year in extra income compared with a dropout; and a college education is worth $3,000 a year in extra earnings. Check these figures against the data in Table I. (Hint: estimates of lifetime earnings were based on the assumption that a man's working life is 46 years.) Do you agree with the statements, or disagree? Agree_____ Disagree_____.

Now let's look at the lifetime earnings of workers in various occupations who have different amounts of schooling. Table II shows, for example, that a policeman who graduates from college could expect to earn about $286,000 in his lifetime -- about $7,000 a year, after graduation, based on projections of 1959 earnings. If his schooling ended with a high school diploma, his earnings would be $56,000 less.

Table II. LIFETIME EARNINGS BY OCCUPATION AND YEARS OF SCHOOLING

Occupation	1 to 3 years of high school	4 years of high school	1 to 3 yrs. of college	4 yrs. of college
Accountants & Auditors	$272,000	$286,000	$292,000	$361,000
Carpenters	193,000	209,000	207,000	229,000
Clerical Workers	203,000	218,000	225,000	258,000
Electrical & Electronic Technicians	263,000	270,000	263,000	——
Farm Labors & Foremen	97,000	117,000	138,000	167,000
Laborers (nonfarm)	157,000	173,000	174,000	192,000
Plumbers & Pipe Fitters	242,000	252,000	258,000	——
Policemen & Detectives	217,000	230,000	246,000	286,000
Sales Workers	232,000	276,000	306,000	287,000

Note: Estimates are for males only.
SOURCE: Bureau of the Census, Income Distribution in the United States, ibid., pp. 269-296.

Questions

II-1. Who has higher lifetime earnings, a Clerical Worker with two years of college, or an Electronic Technician with four years of high school? What kind of training did the Electronic Technician get to qualify for his job?

II-2. In general, do the facts support Miller's claim that "there are measurable financial returns associated with educational attainment"?

There are three things to keep in mind about these statistics on expected lifetime earnings:

1-- They do show that, in general, more education leads to higher earnings;
2-- They do not predict what any particular individual will earn in his lifetime (they only indicate what your chances are of earning a certain amount);
3-- The figures are subject to change as the economy grows and changes over time.

As an illustration of this third point, estimates of lifetime earnings by negro college graduates -- based on 1959 data -- probably will turn out to be incorrect in the long run. The Census Bureau reported that estimated lifetime earnings of negro college graduates amounted to $185,000, compared to $385,000 for white college graduates, and compared to $191,000 for white males who completed only eight years of schooling. However, earnings and family income of negroes have been going up relative to whites recently. In 1966, median family income of negroes was 58% of the median family income of whites. Annual earnings by negro men in 1966 ranged from two-thirds to four-fifths as much as whites having comparable education.

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Question: How would you explain the fact that the average Negro college graduate could expect to earn less than the average White worker who stopped his education after the 8th grade?

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Much of the data we have presented on lifetime earnings is concerned with high school and college education. There is no information about women's earnings, or about the type and quality of schooling. Why? The answer in part is that economists have only begun to study the payoff from education; much research remains to be done. Only a few findings have so far been published, for example, on the cash value of technical training. One study showed that a year after completion of a post-high school technical course in North Carolina, graduates were earning $553 a year more than their high school classmates; and at the end of the four years, the training-related earnings advantage had increased to $1,036.

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Education provides many benefits to individuals and to the whole society. It helps to free man from ignorance; it strengthens democracy; it helps make the economy more productive. Education also provides a cash payoff to the individual worker who invests in his own "human capital" by getting more schooling and training. This is an important lesson for young people to learn, especially boys and girls growing up in low-income homes. Education can increase your chances of getting a better job as well as a better-paying job and offers a possible escape from poverty and dependency.

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Today's Lesson in Brief

Education is an investment in human resources that yields a cash payoff. Studies show that the more highly educated a person is, the higher his earnings. Education provides many benefits to the individual and to society as a whole. It offers a possible way out of poverty, deprivation, and dependency for children growing up in low-income families.

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